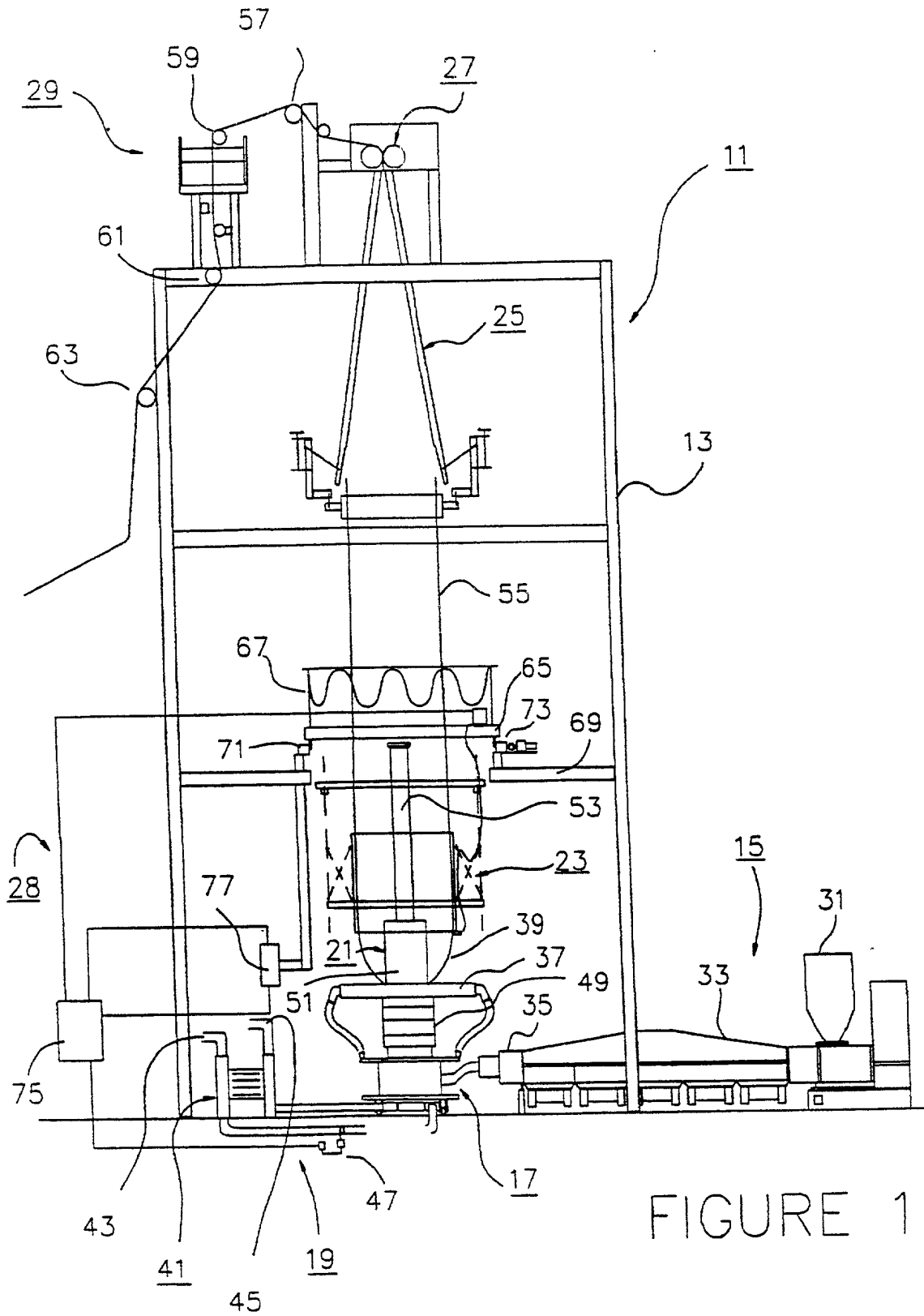


FIG. 1



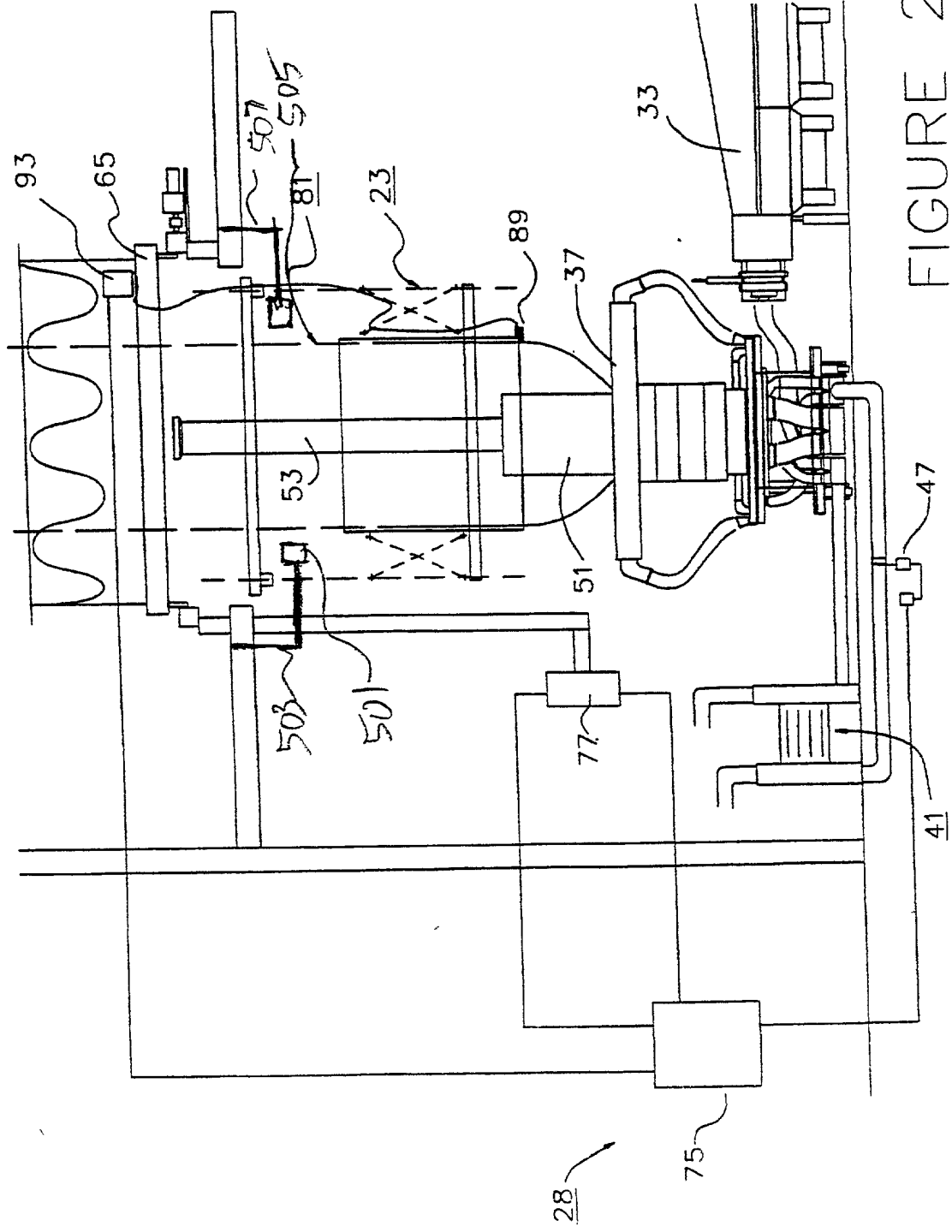


FIGURE 2

FIG. 3

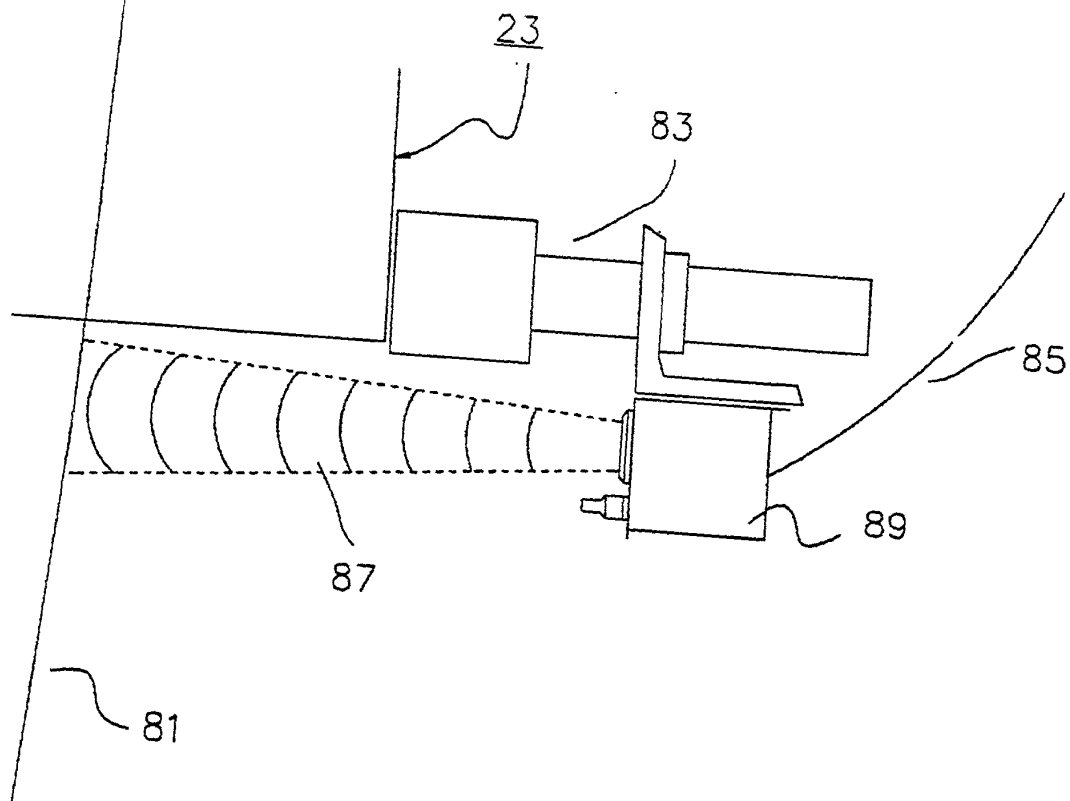


FIGURE 3

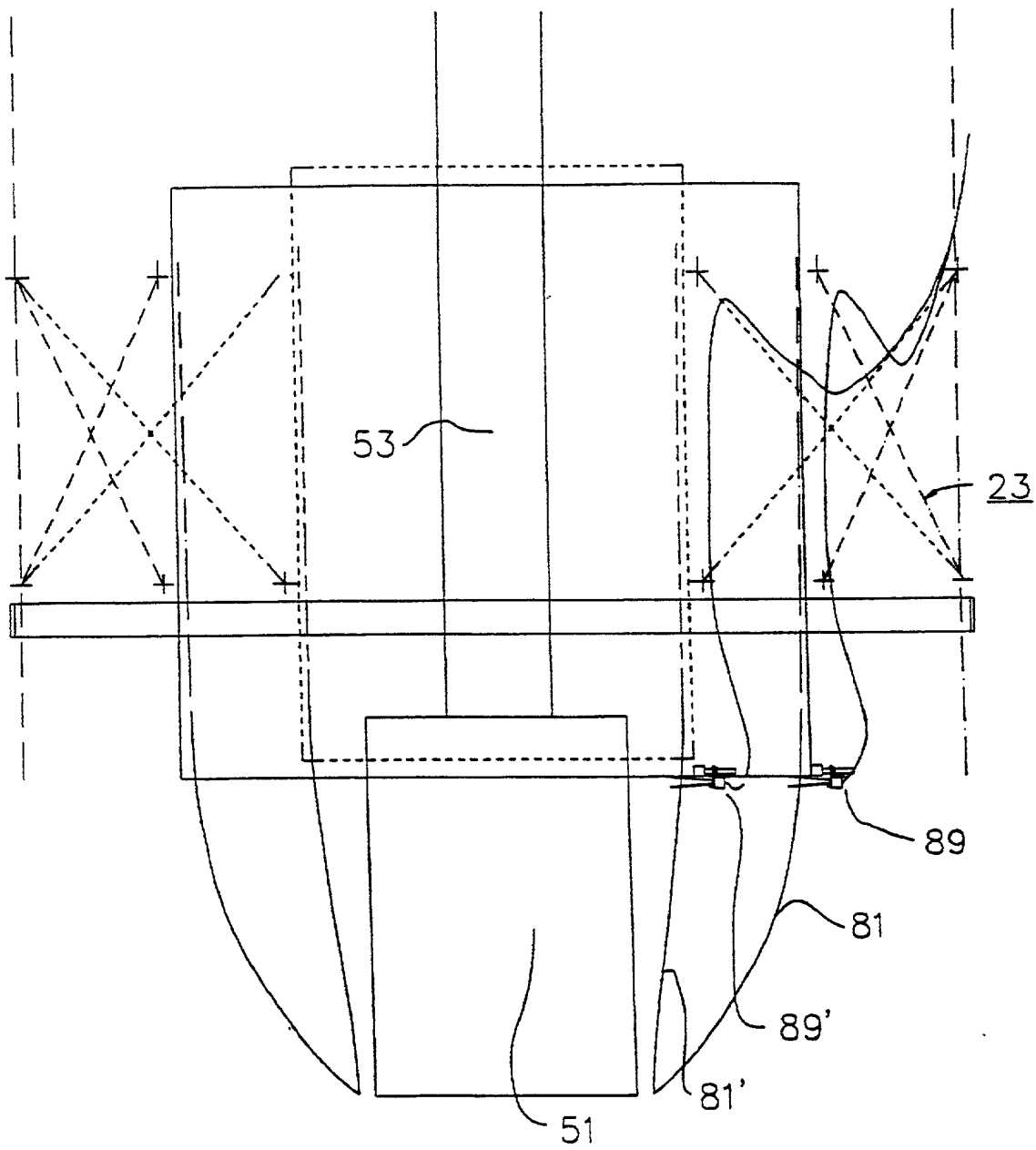


FIGURE 4

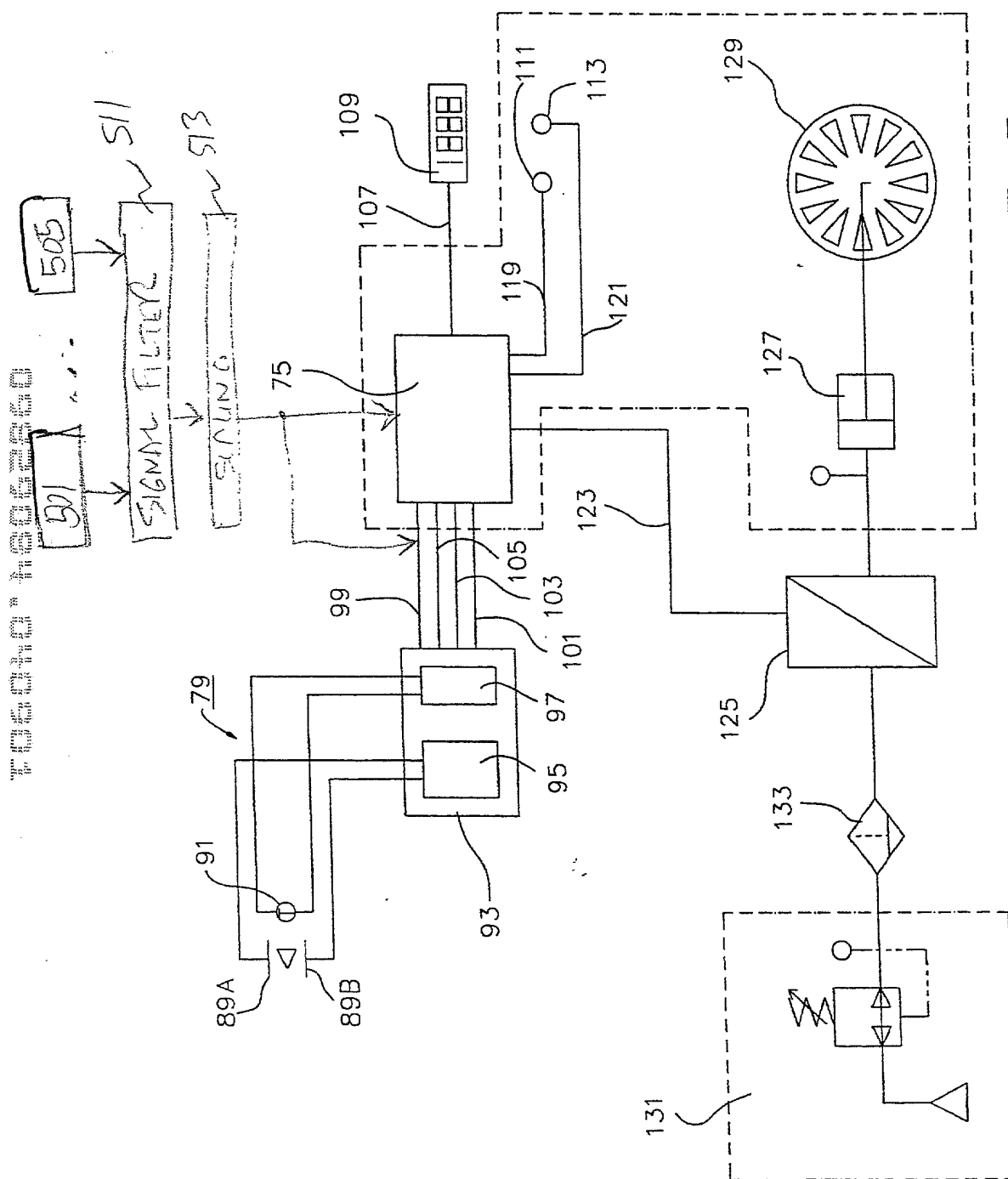


FIGURE 5

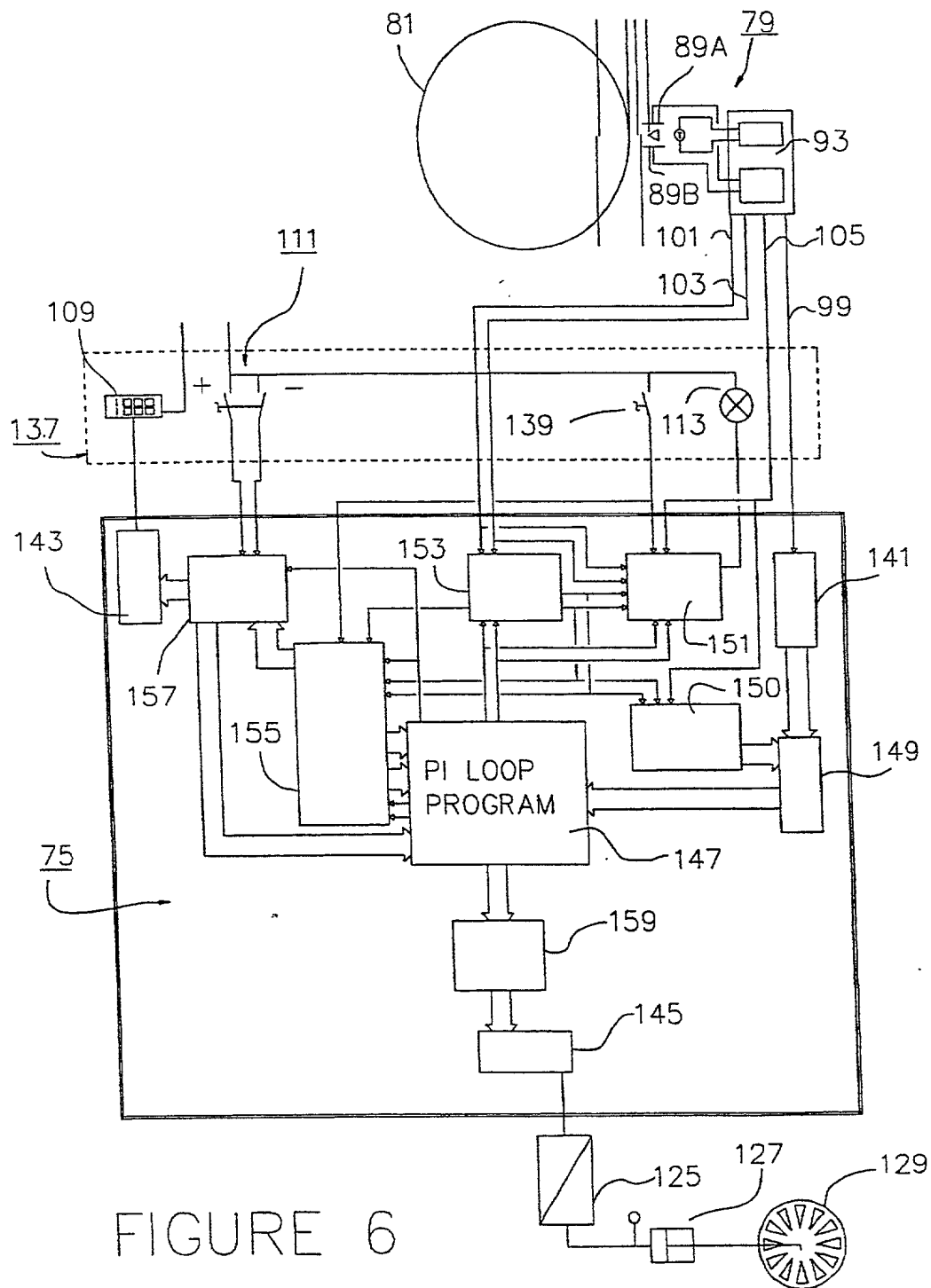


FIGURE 6

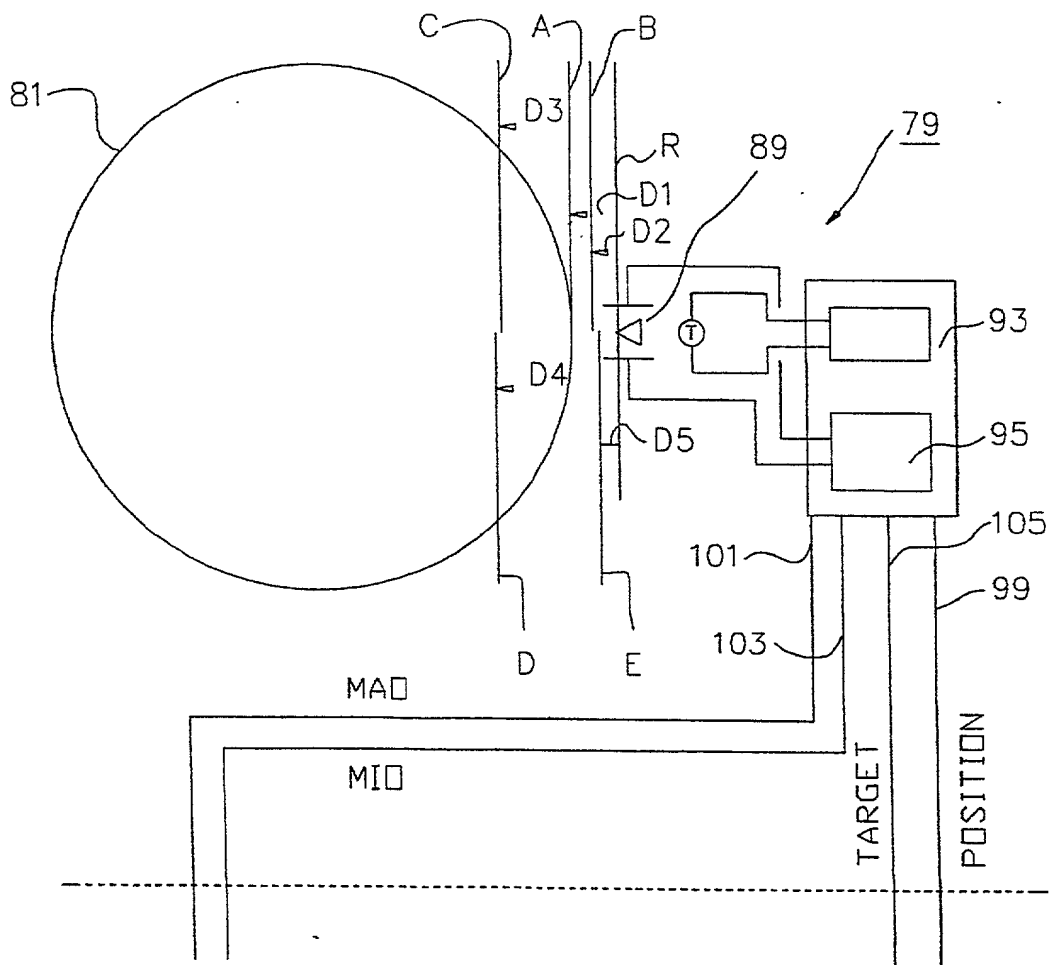


FIGURE 7A

FIG. 7B

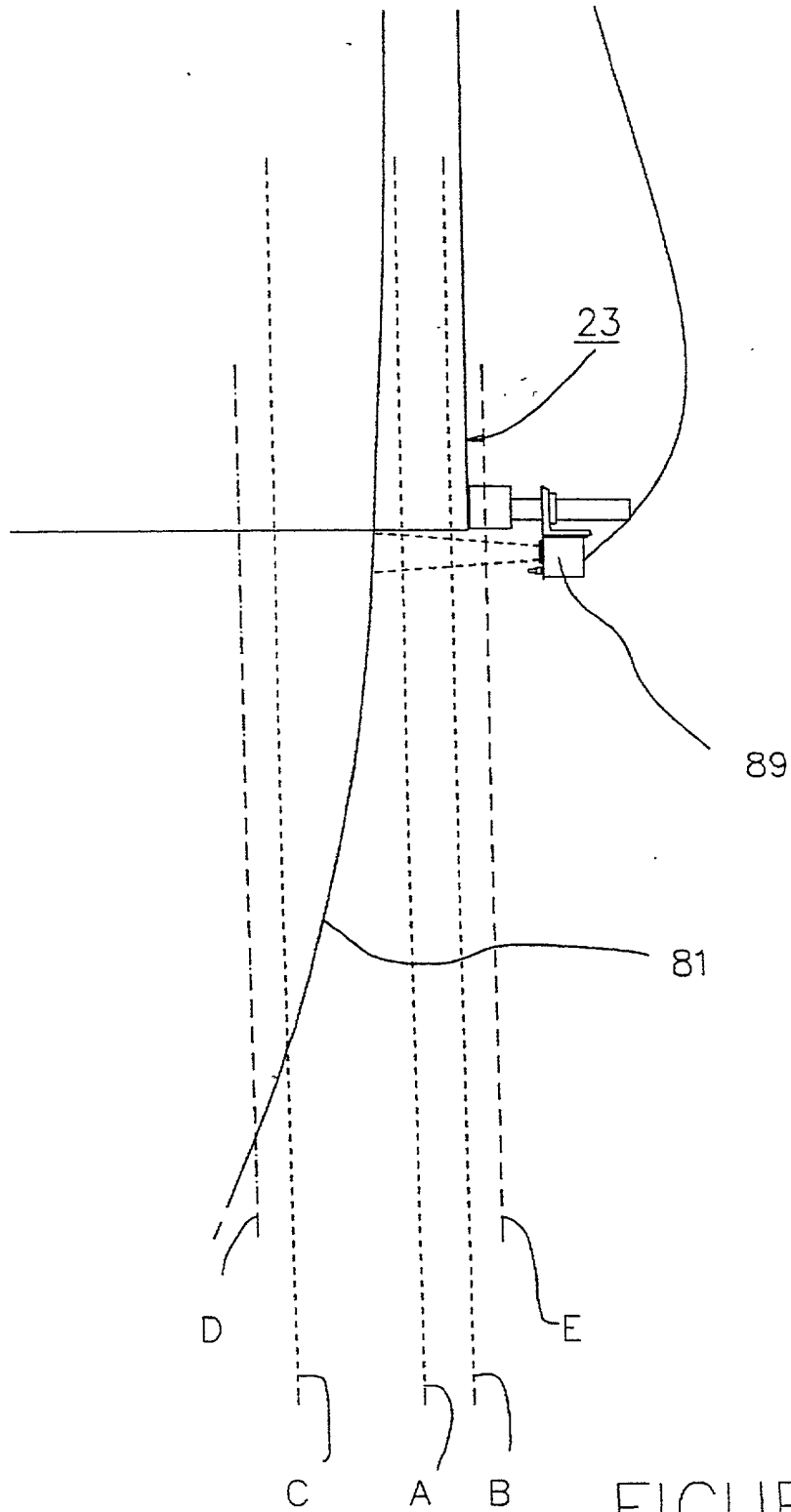


FIGURE 7B

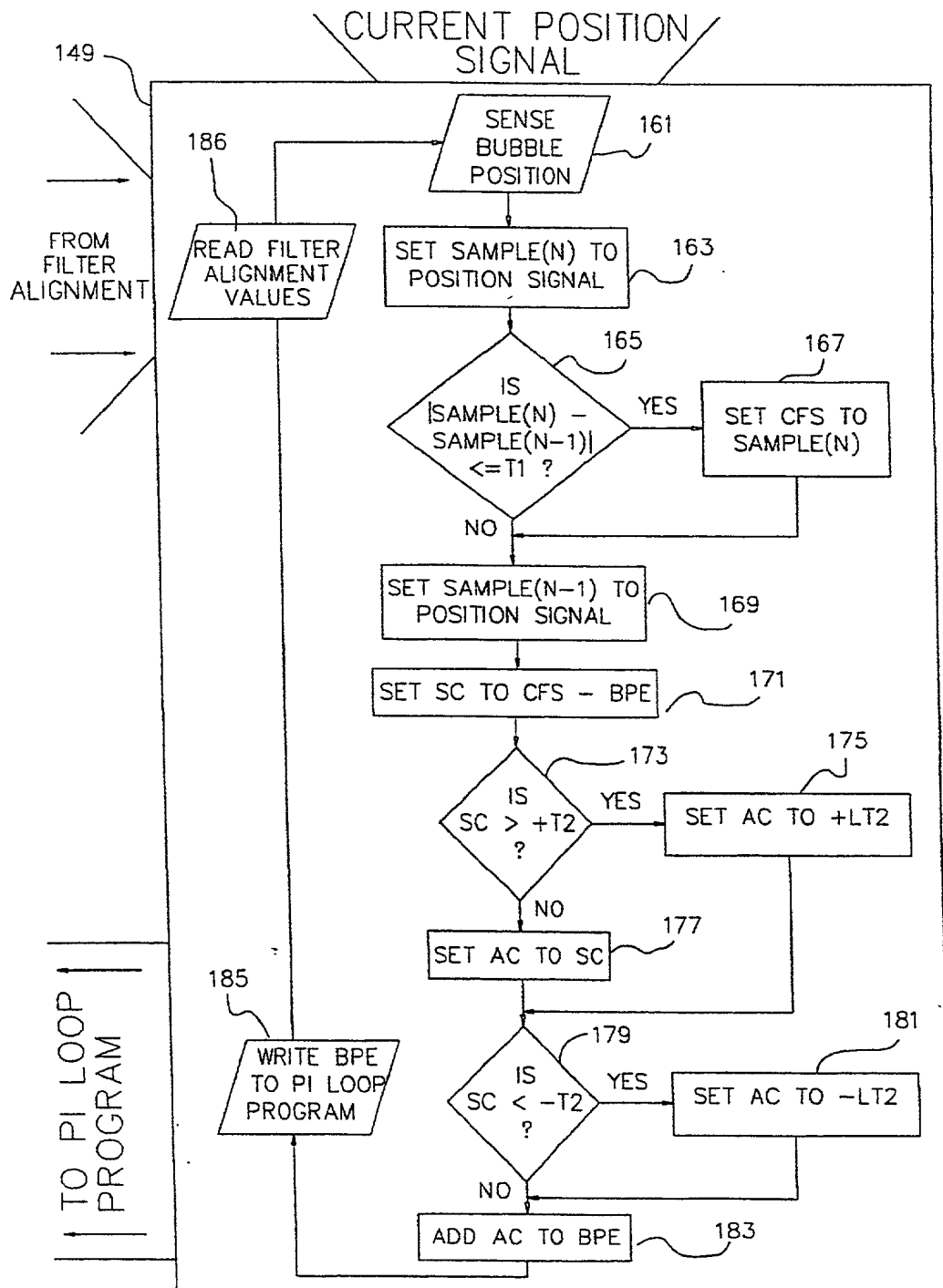


FIGURE 8A

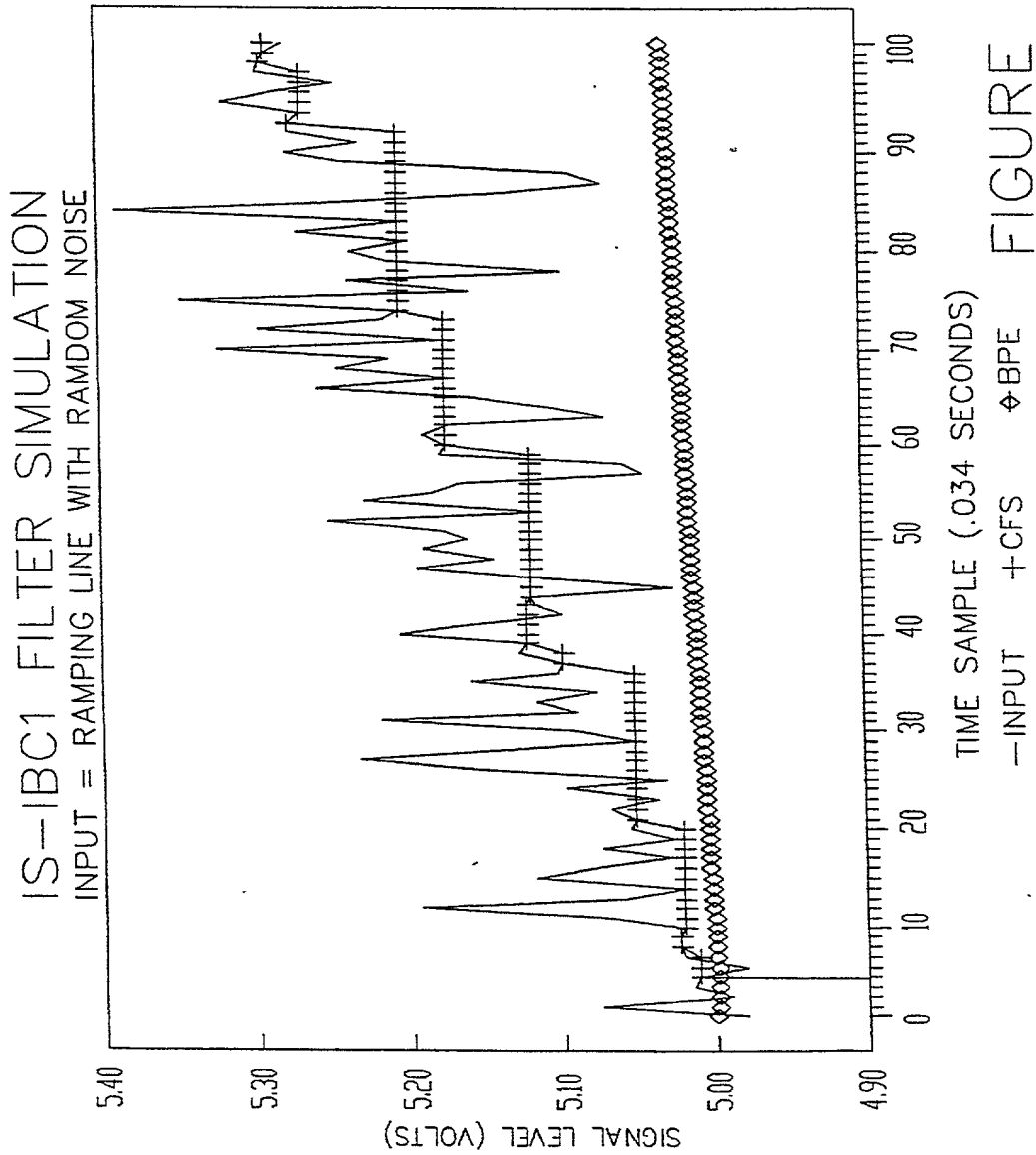


FIGURE 8B

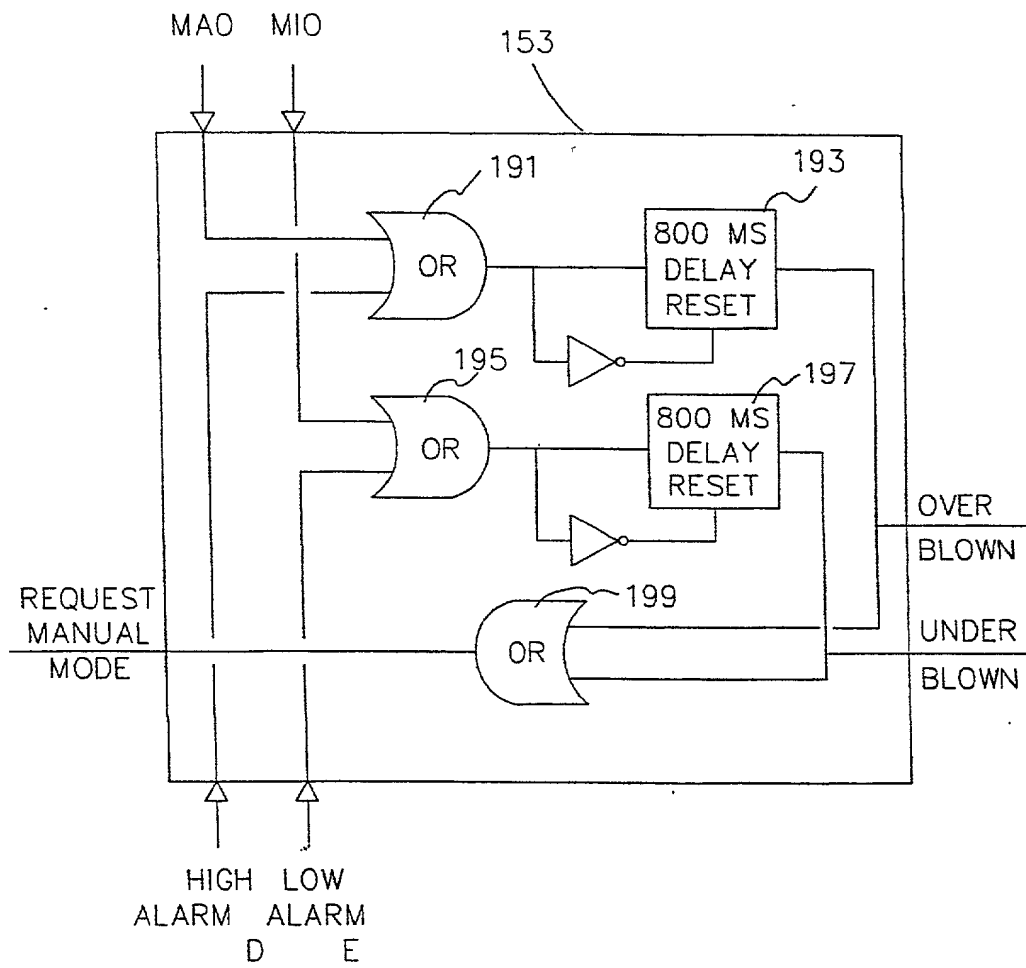


FIGURE 9

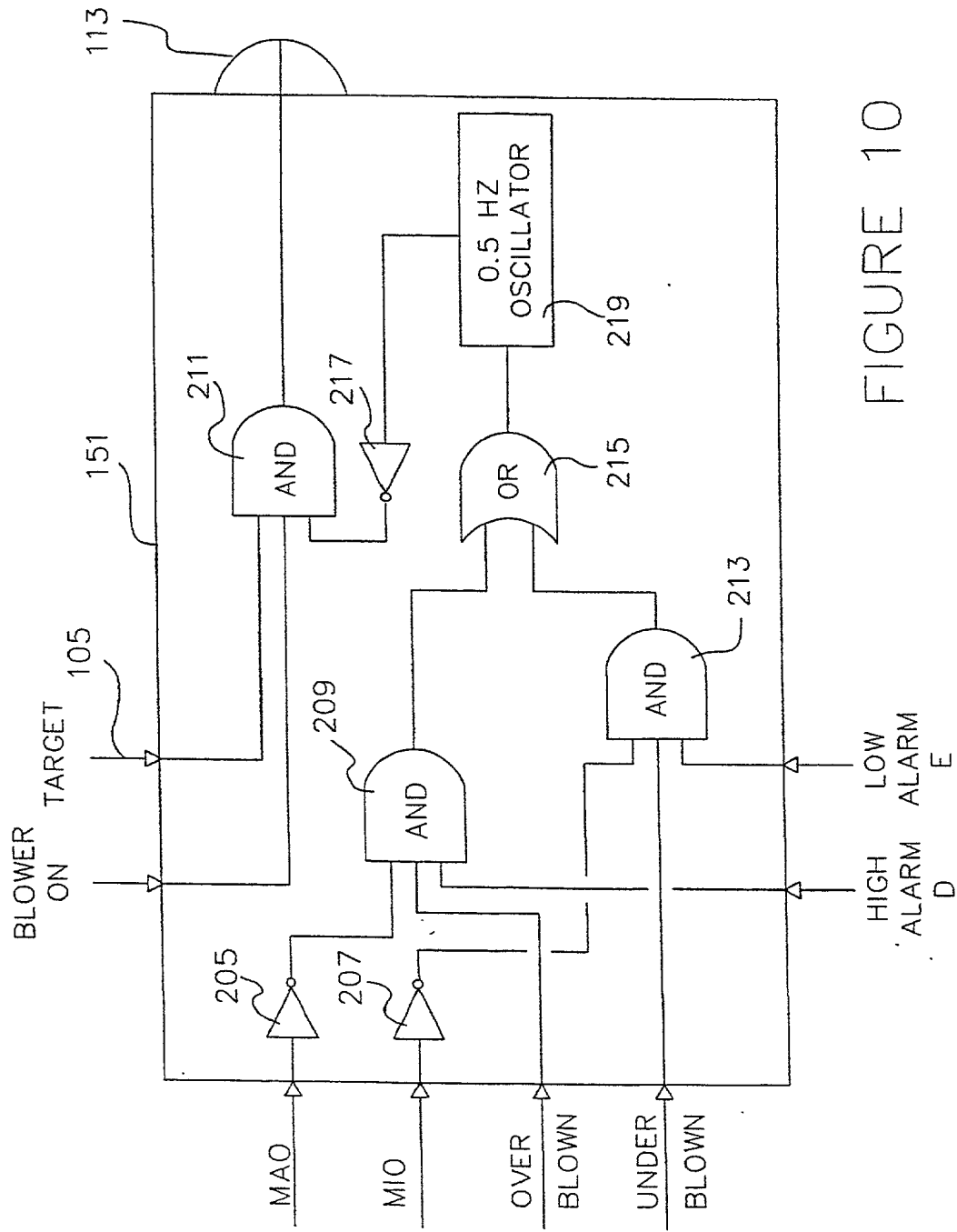


FIGURE 10

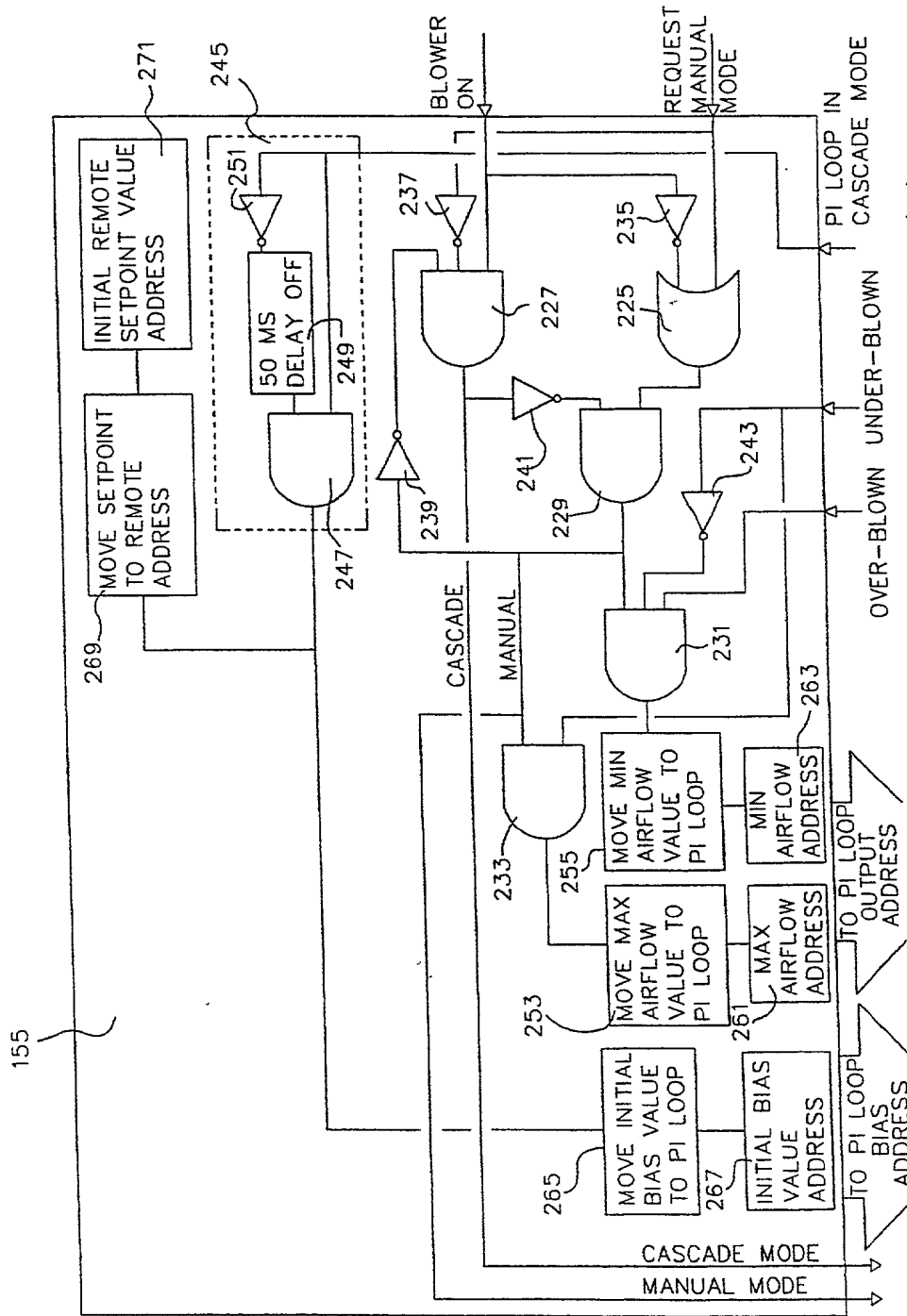


FIGURE 11

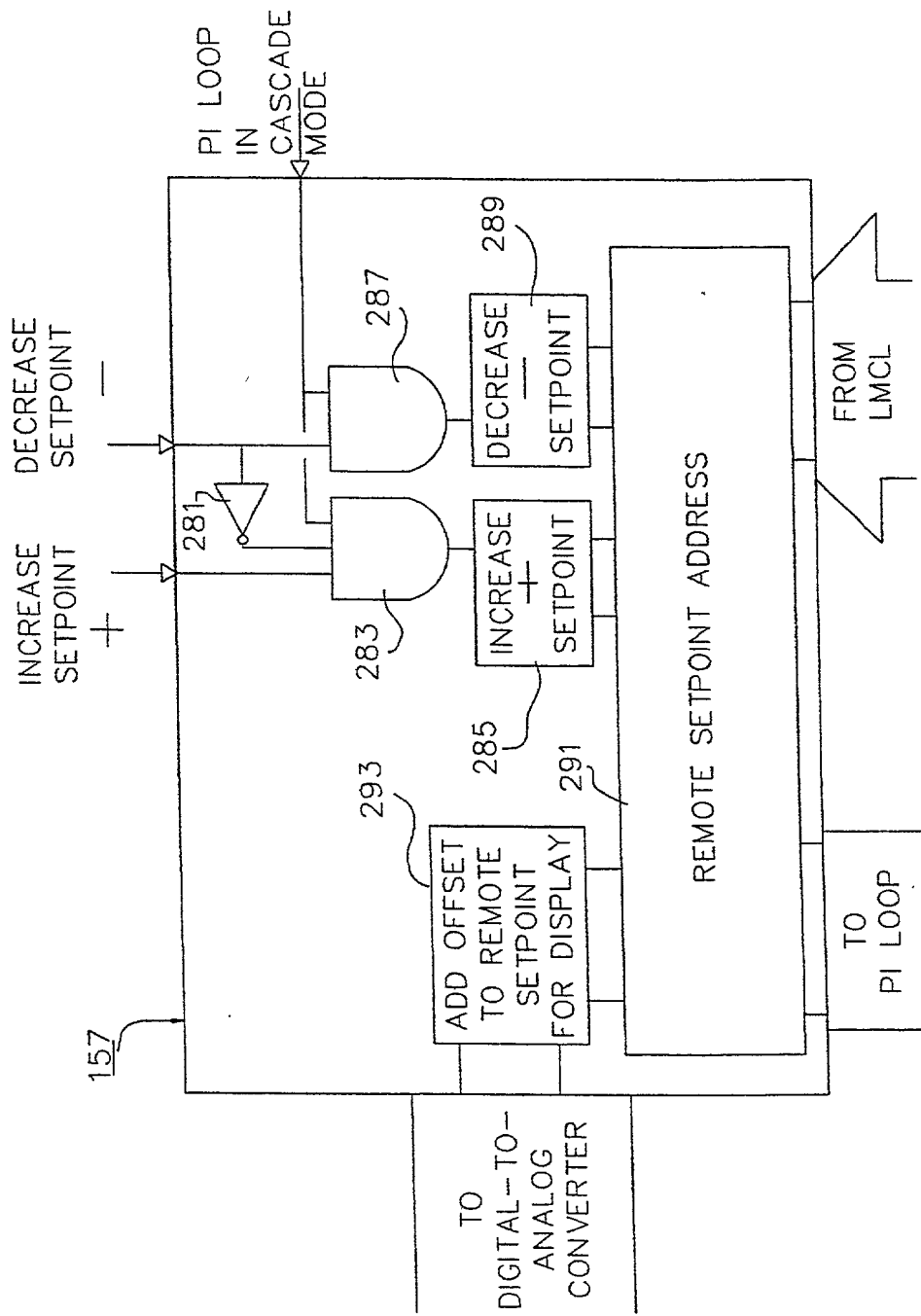


FIGURE 12

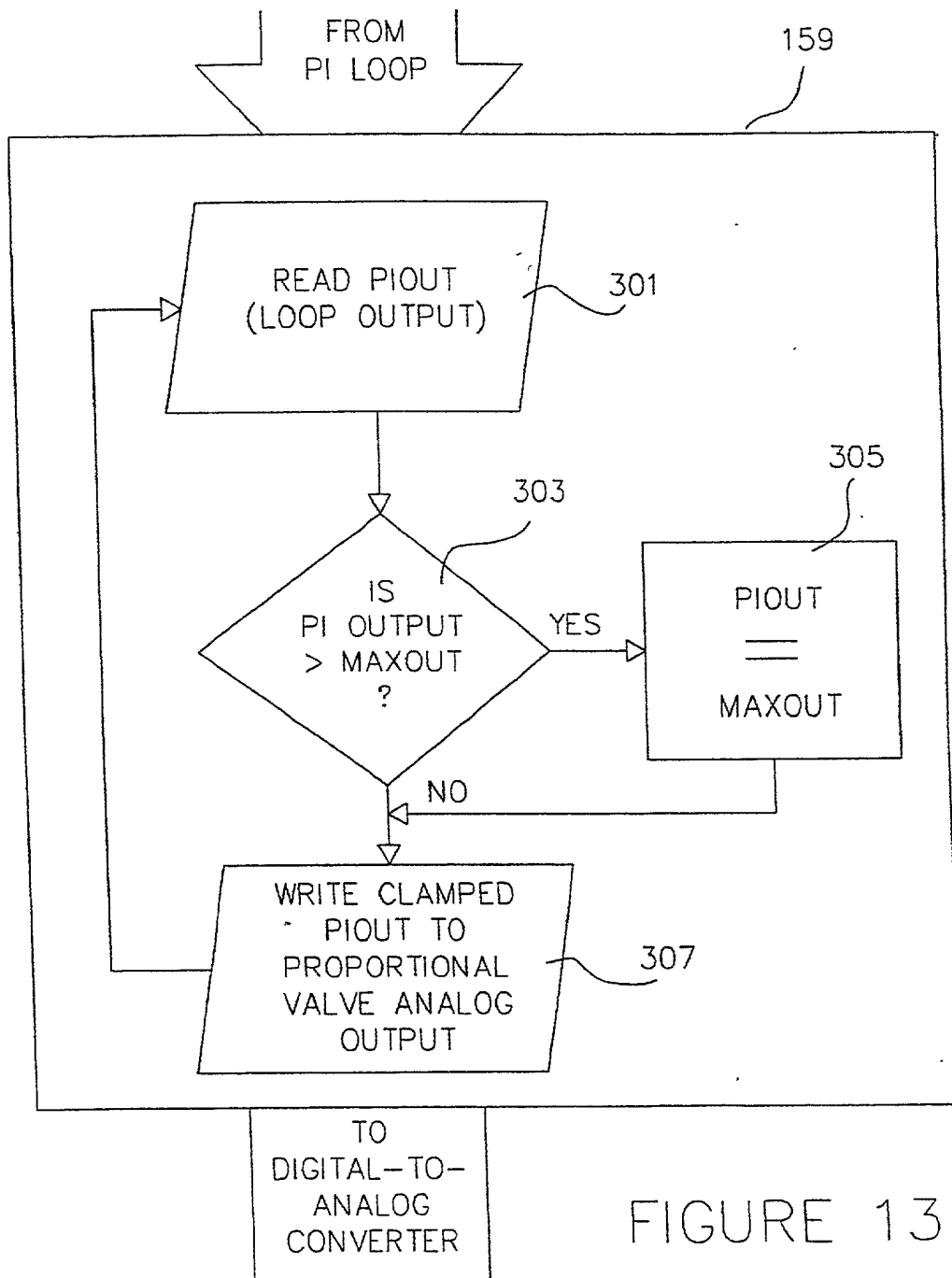


FIGURE 13

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The schematic diagram illustrates a target position detection system. A large circle labeled B1 represents the target area. A vertical line C passes through the center of B1. A horizontal line A intersects line C at point D3. A vertical line B intersects line C at point D1 and point D2. A horizontal line R intersects line B at point D4. A vertical line E intersects line B at point D5. A rectangular component 89 is connected to line B between points D1 and D2. This component 89 is further connected to two rectangular components 93 and 95. These components are part of a larger assembly 79. The assembly 79 is connected to a vertical line 99. A horizontal line 101 connects the assembly 79 to a vertical line 103. A horizontal line MAO connects the assembly 79 to a vertical line MIO. A dashed horizontal line is shown at the bottom of the diagram. Labels TARGET and POSITION are placed near the bottom right corner.

FIGURE 15

FIGURE 16

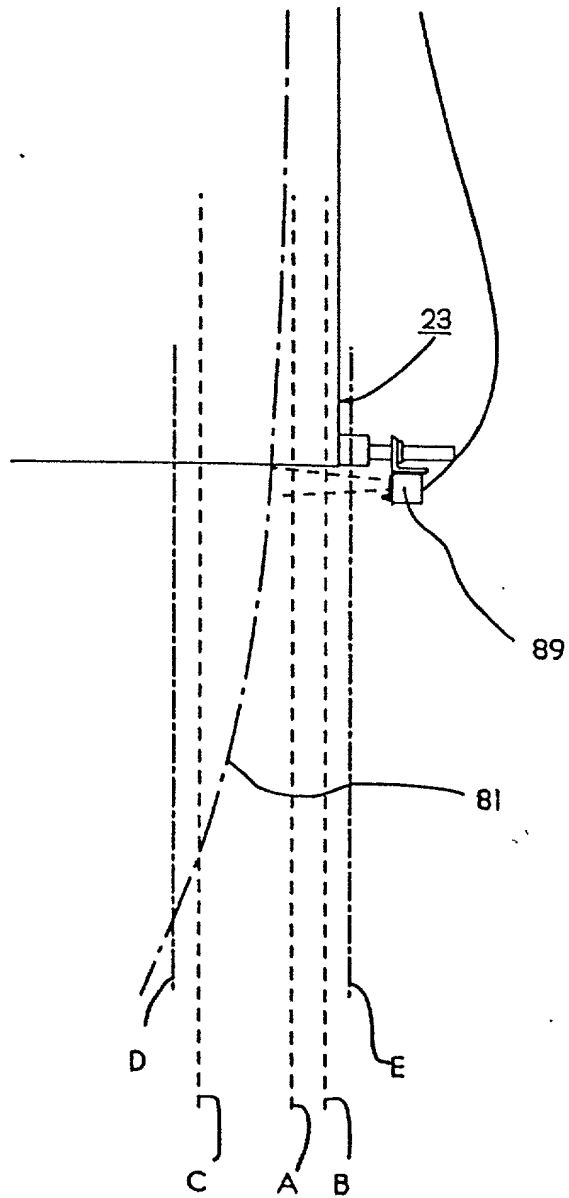


FIGURE 16

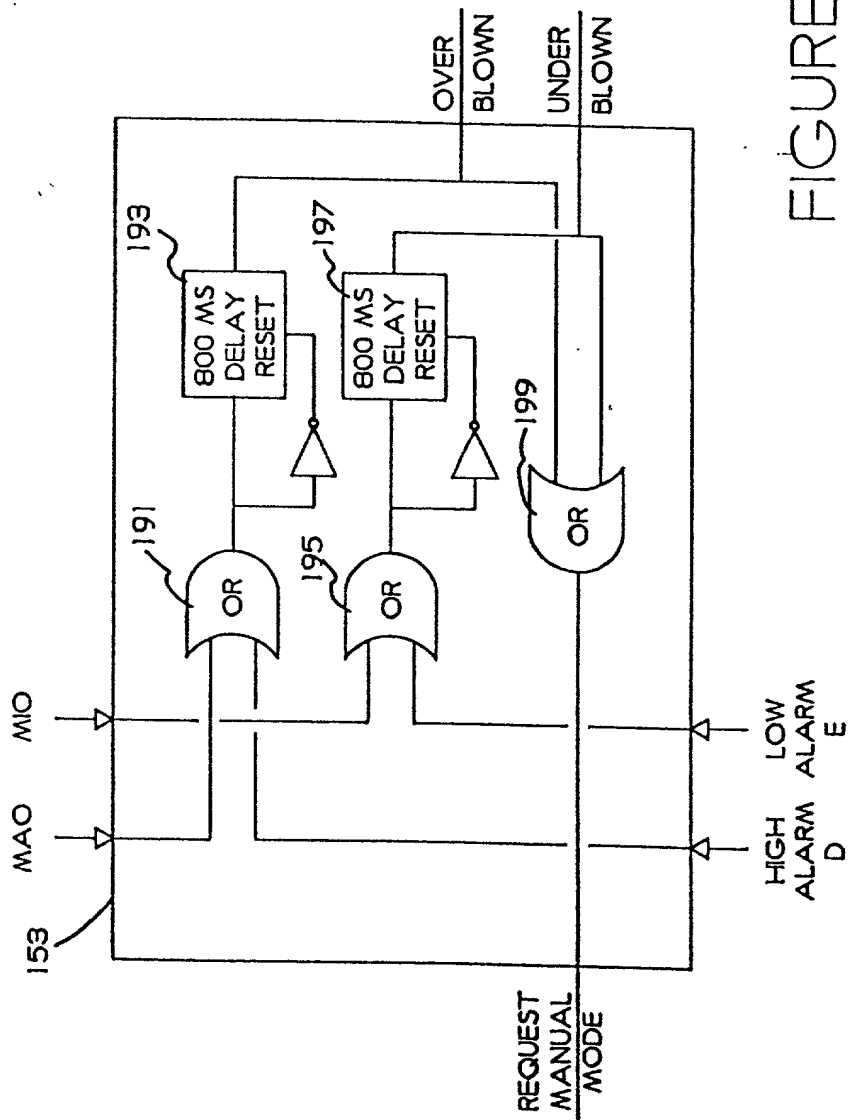


FIGURE 17

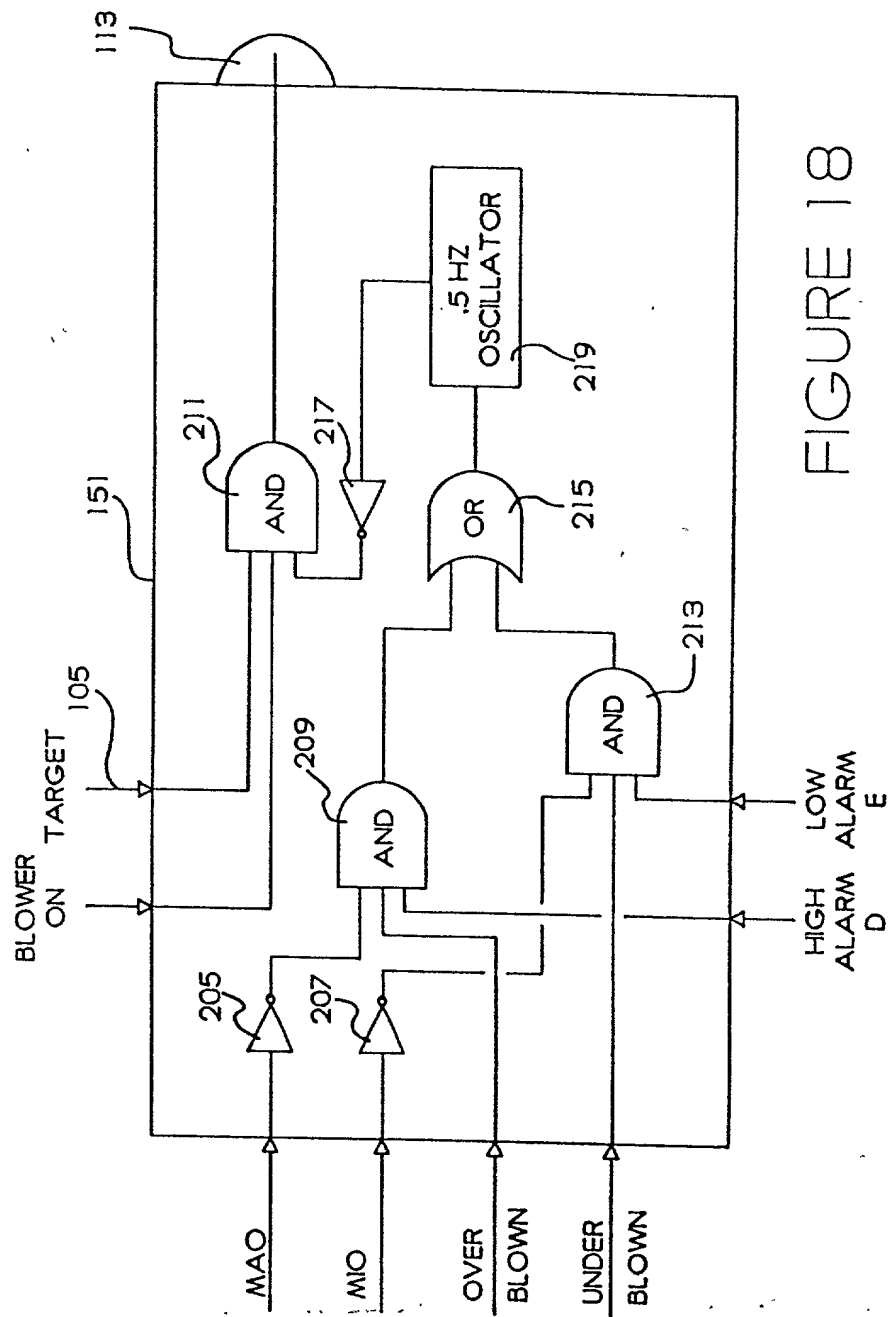
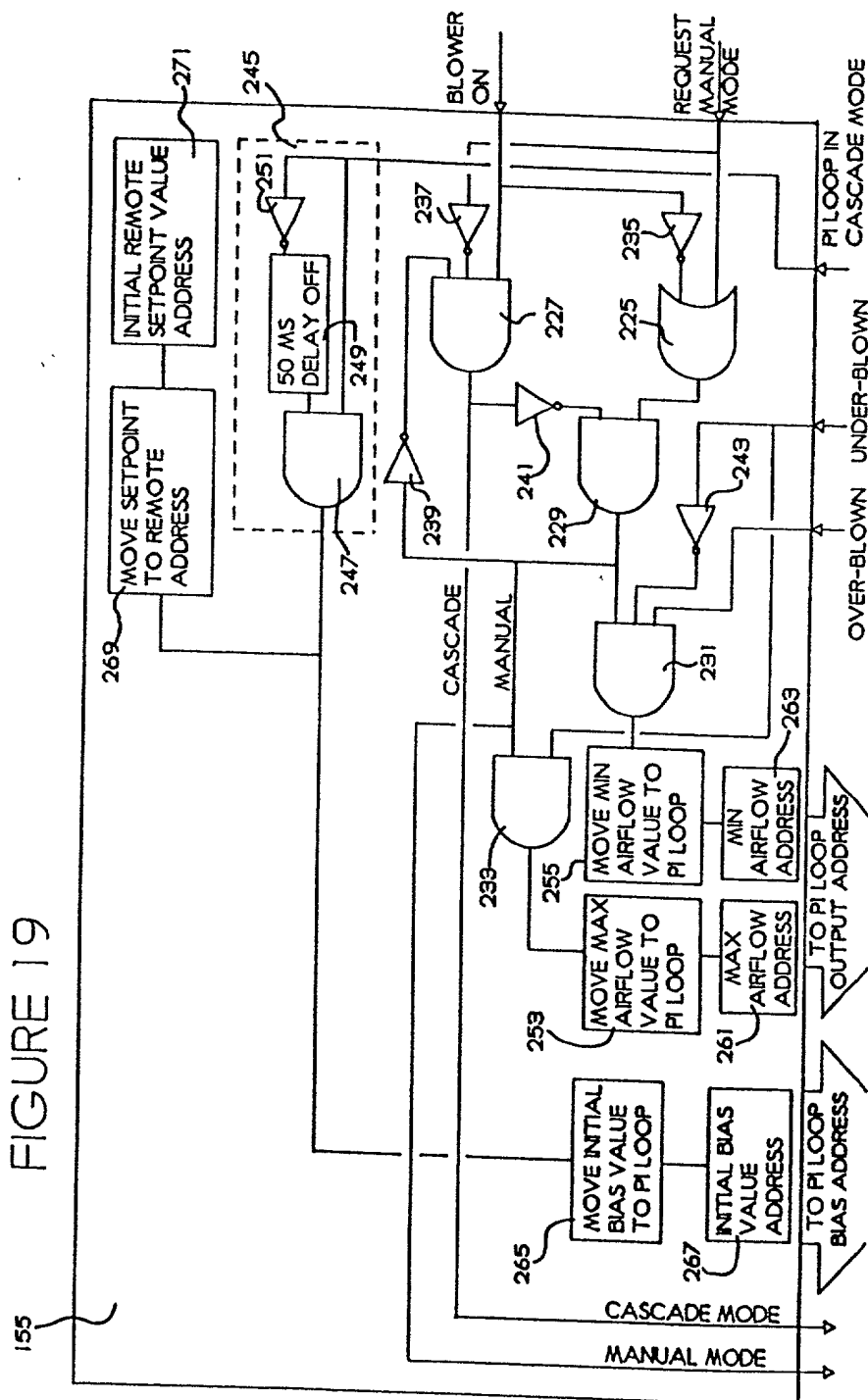


FIGURE 18



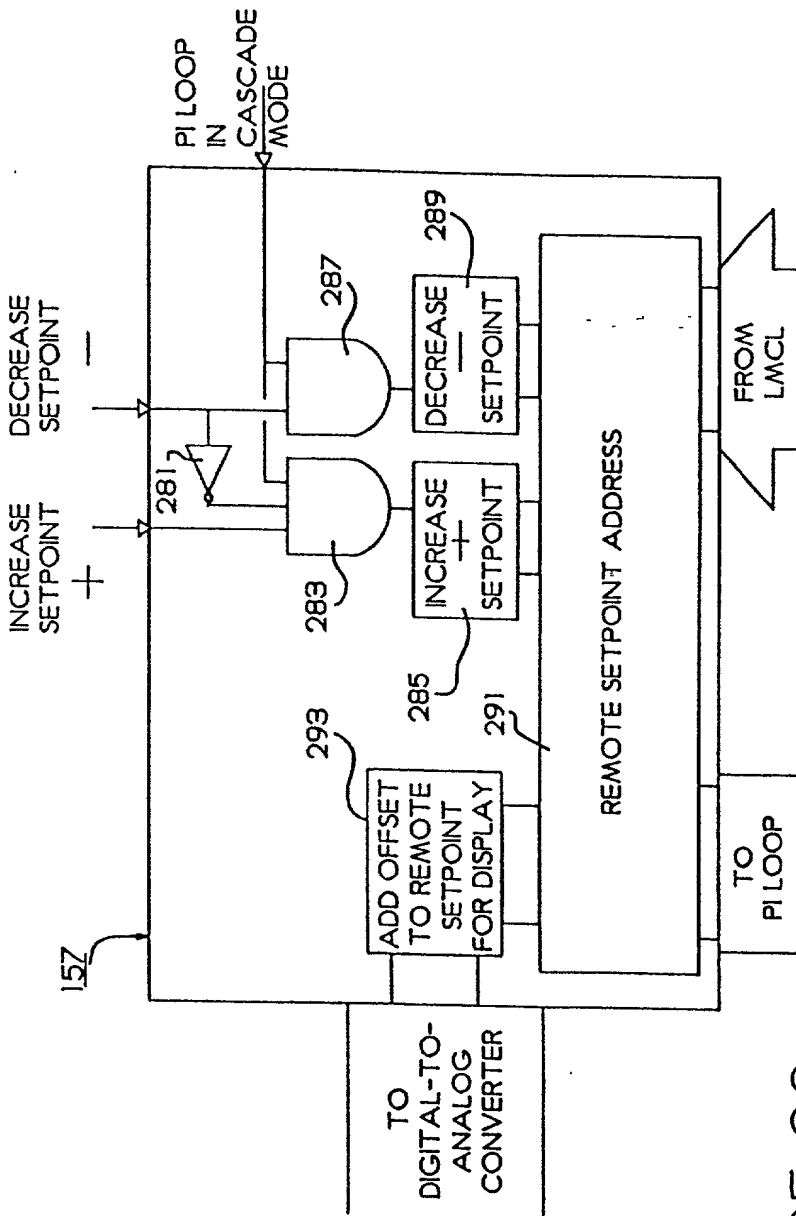


FIGURE 20

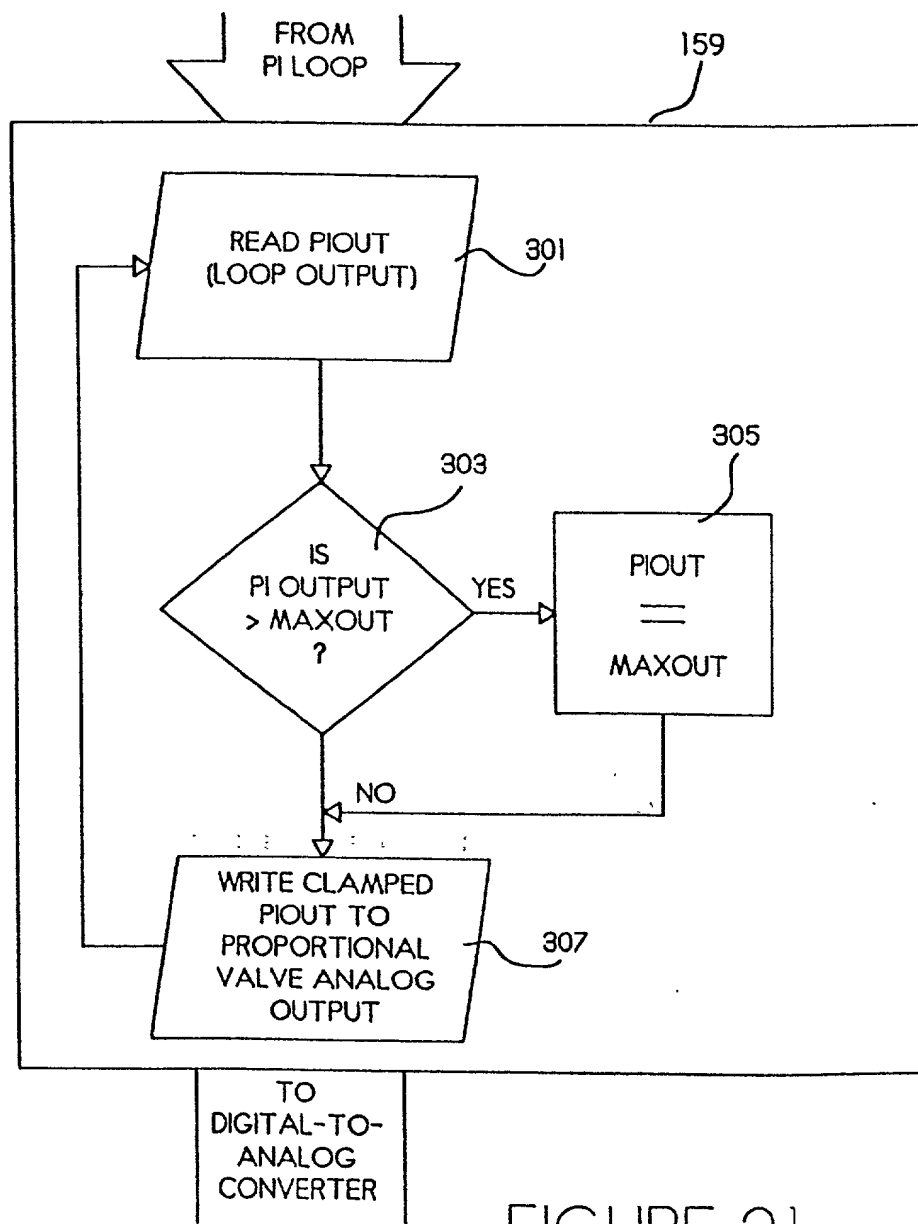
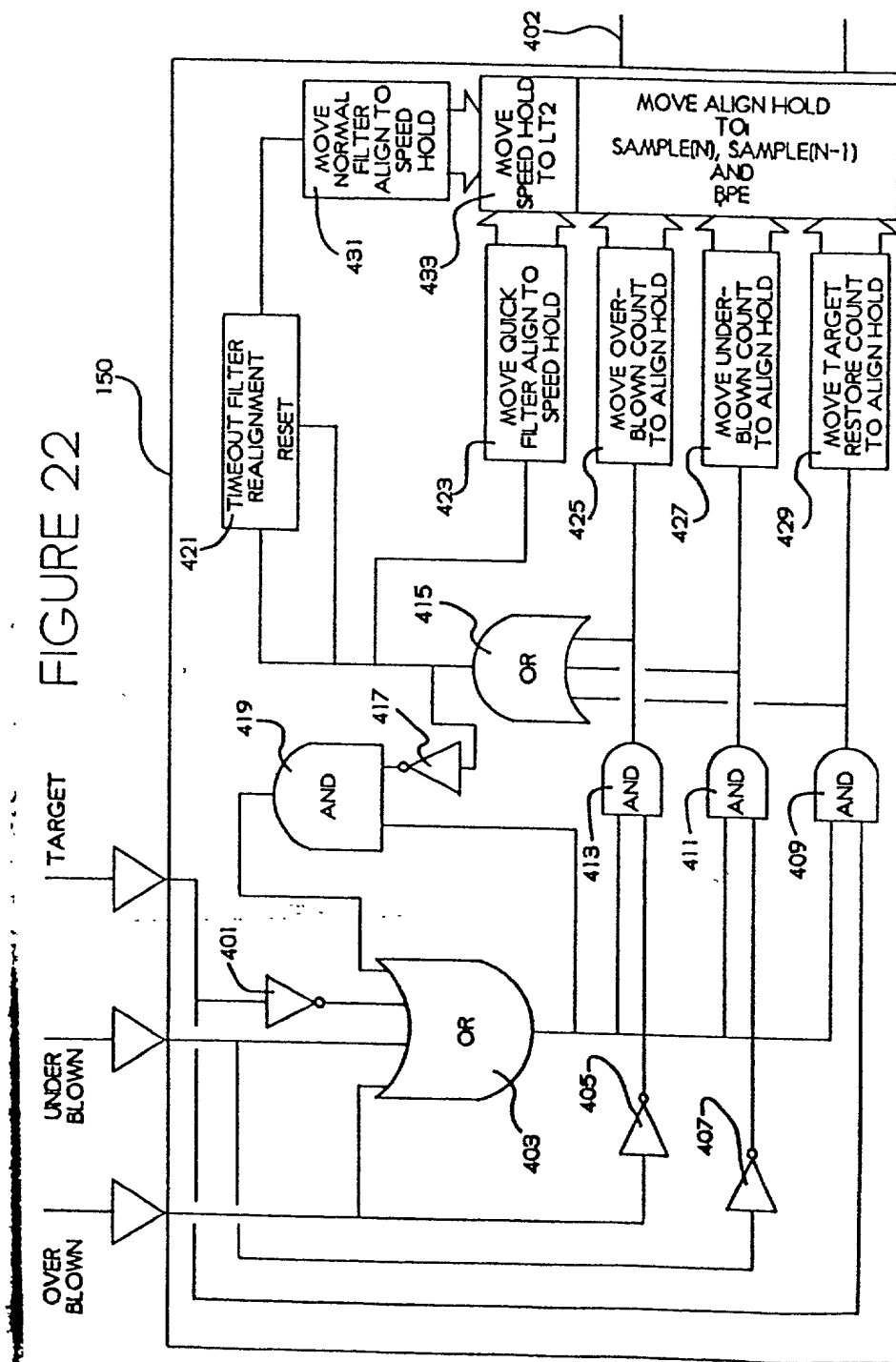


FIGURE 21

150



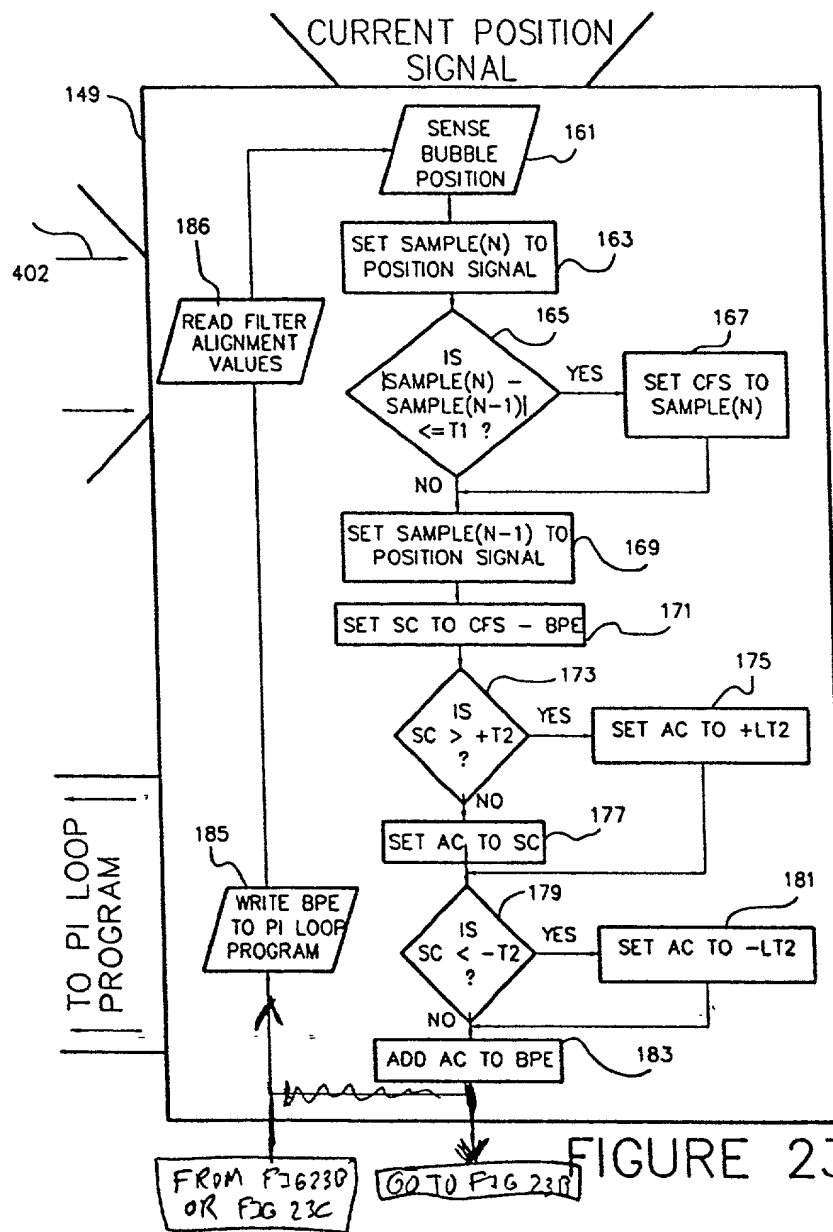


FIGURE 23A

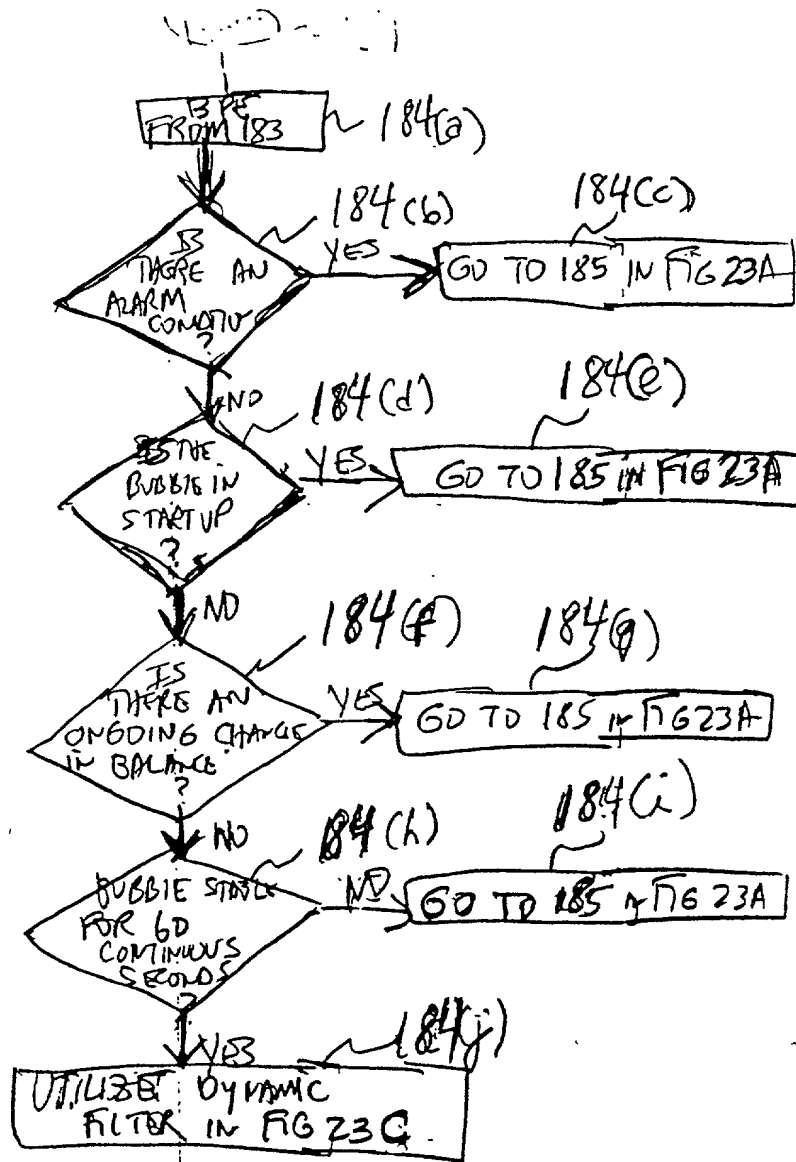


FIGURE 23B

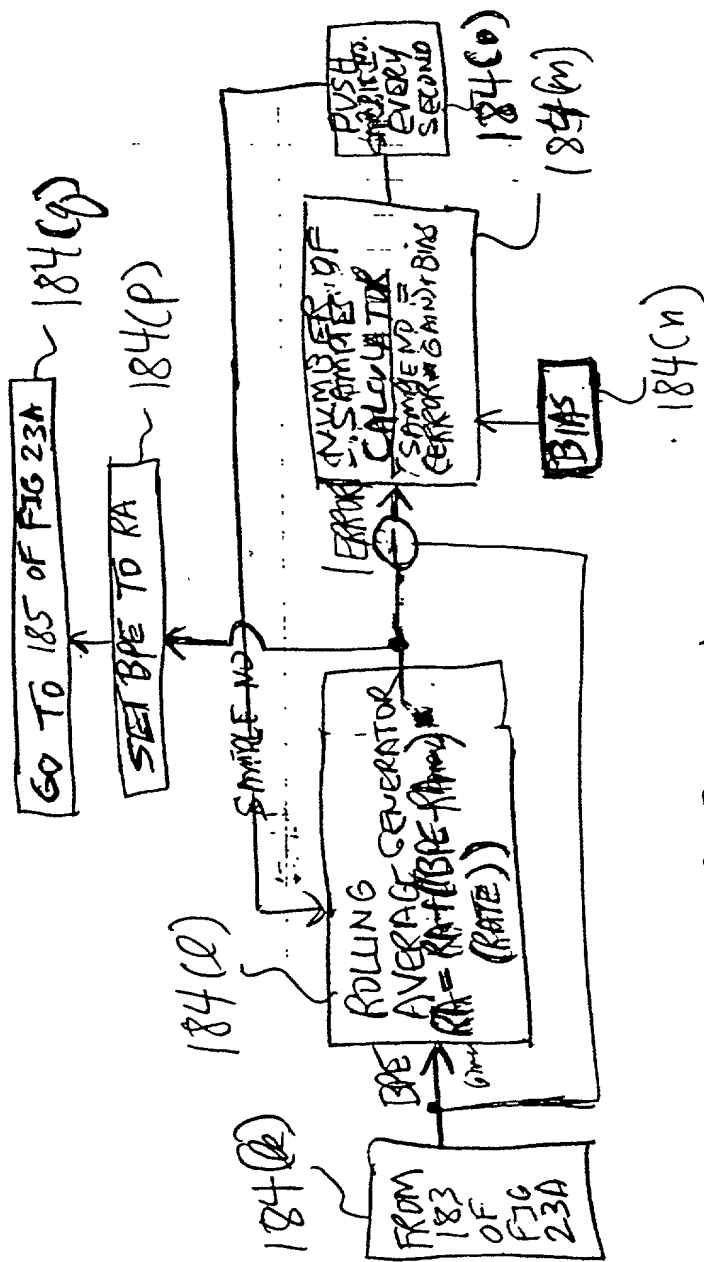


FIG 23A

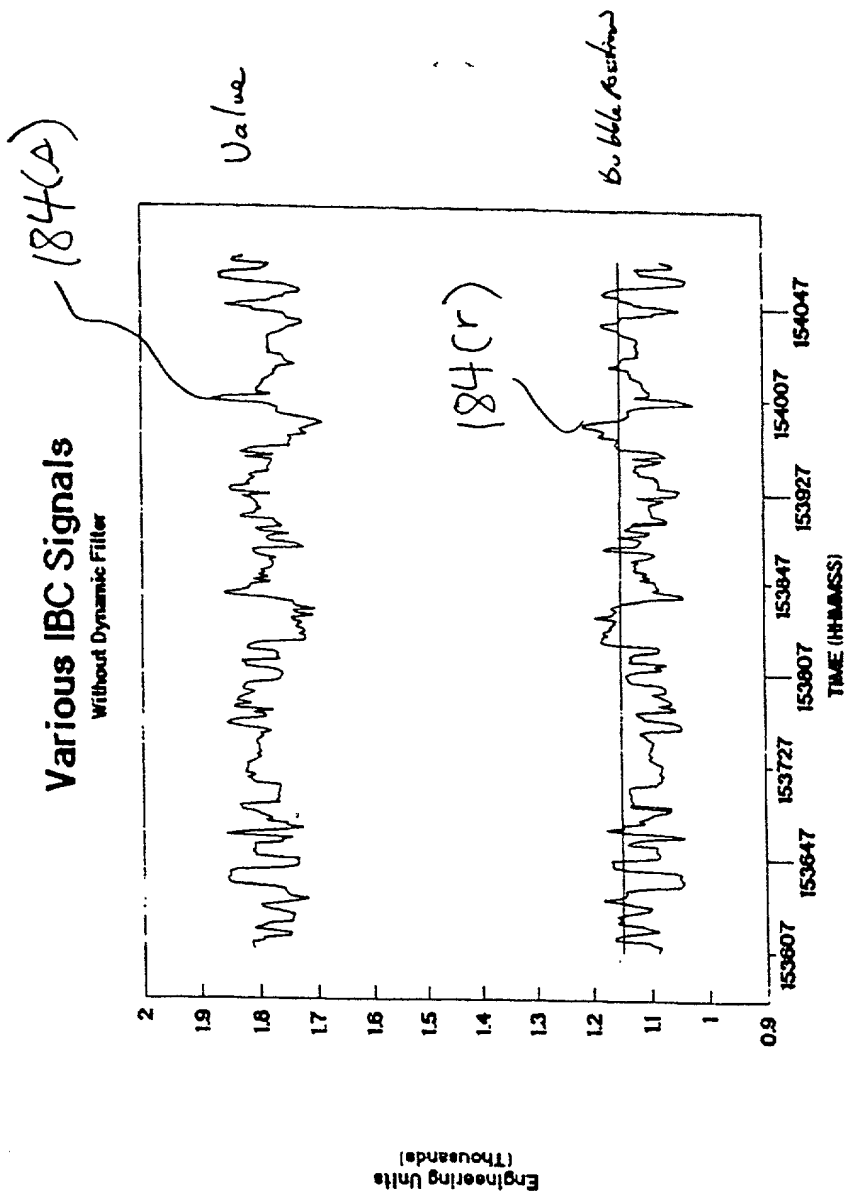


Figure 23D

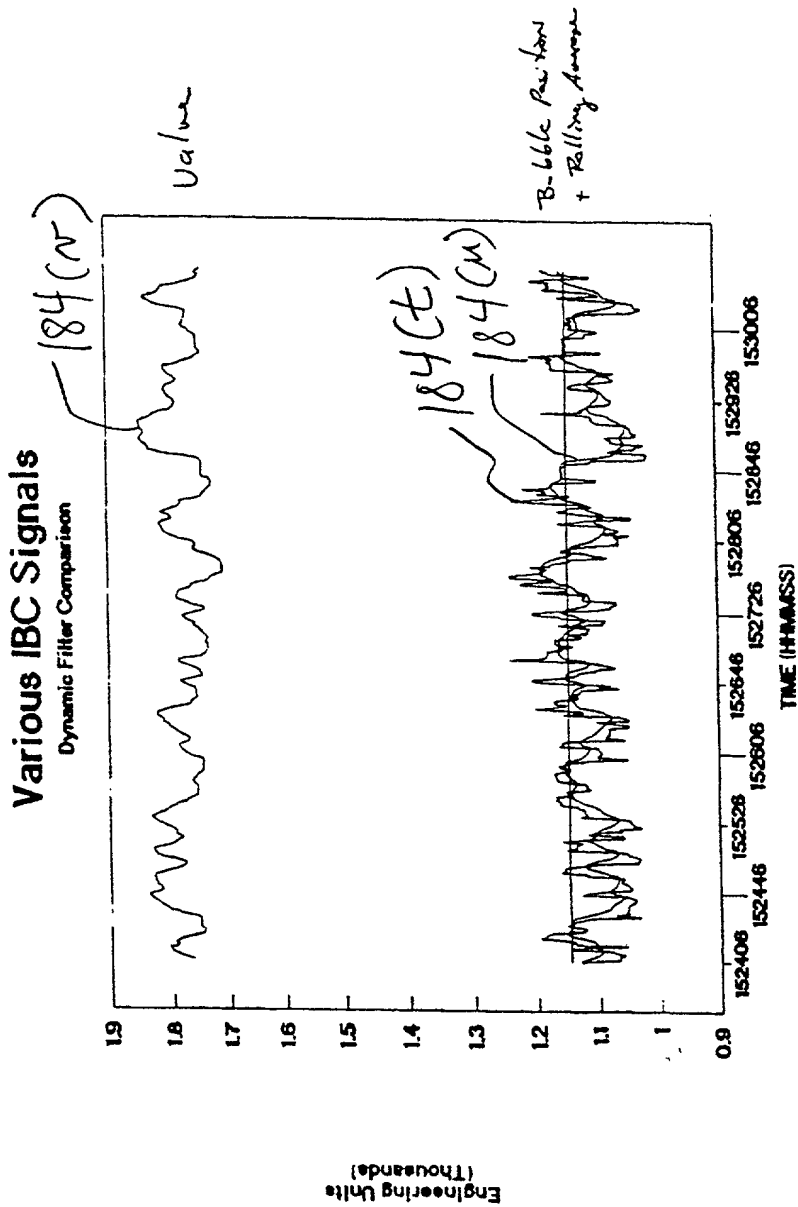


Figure 23E

100% 99% 98% 97% 96% 95% 94% 93% 92% 91% 90% 89% 88% 87% 86% 85% 84% 83% 82% 81% 80% 79% 78% 77% 76% 75% 74% 73% 72% 71% 70% 69% 68% 67% 66% 65% 64% 63% 62% 61% 60% 59% 58% 57% 56% 55% 54% 53% 52% 51% 50% 49% 48% 47% 46% 45% 44% 43% 42% 41% 40% 39% 38% 37% 36% 35% 34% 33% 32% 31% 30% 29% 28% 27% 26% 25% 24% 23% 22% 21% 20% 19% 18% 17% 16% 15% 14% 13% 12% 11% 10% 9% 8% 7% 6% 5% 4% 3% 2% 1% 0%

Frequency Distribution Comparison

Dynamic Filter Vs. BPE

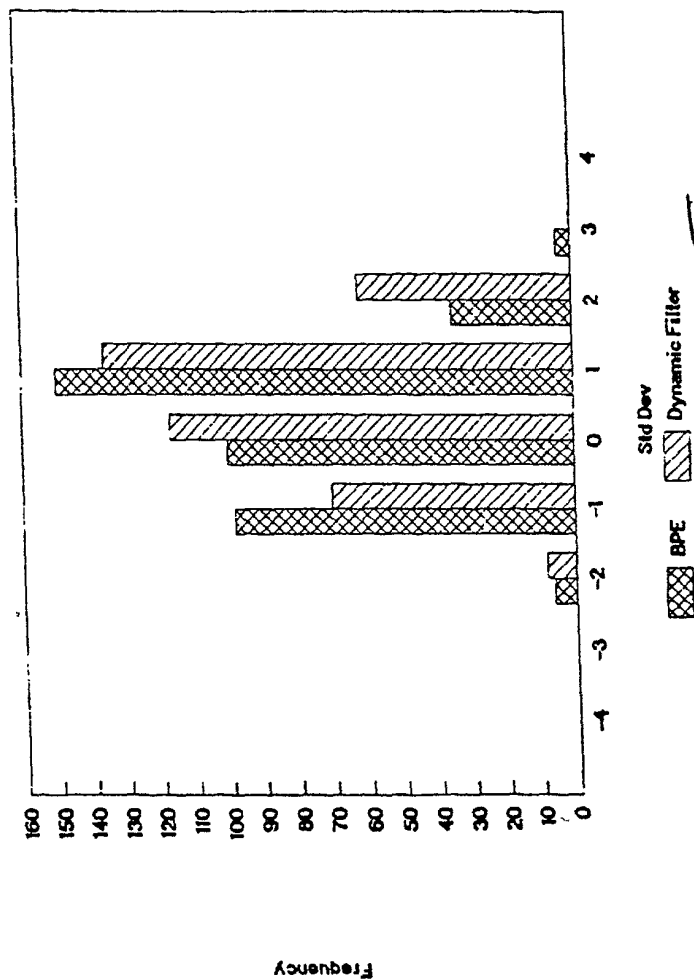


FIGURE 23F

Various IBC Signals Start-Up With Dynamic Filter

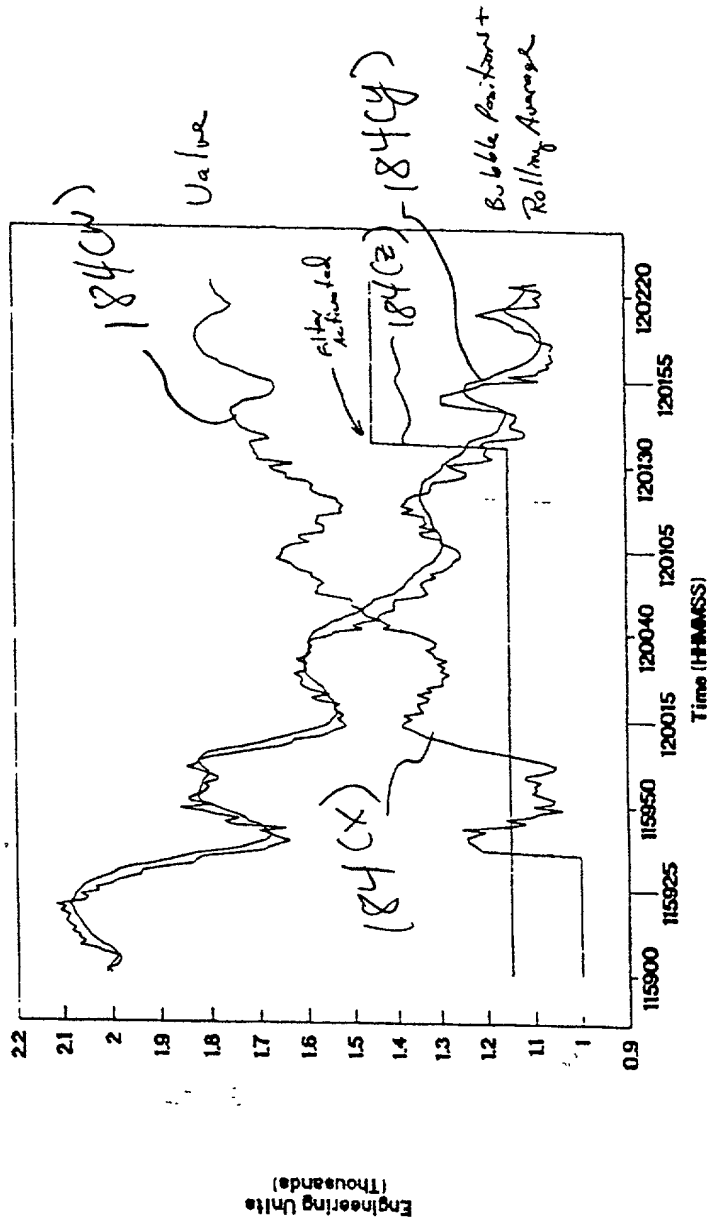


FIG 23G

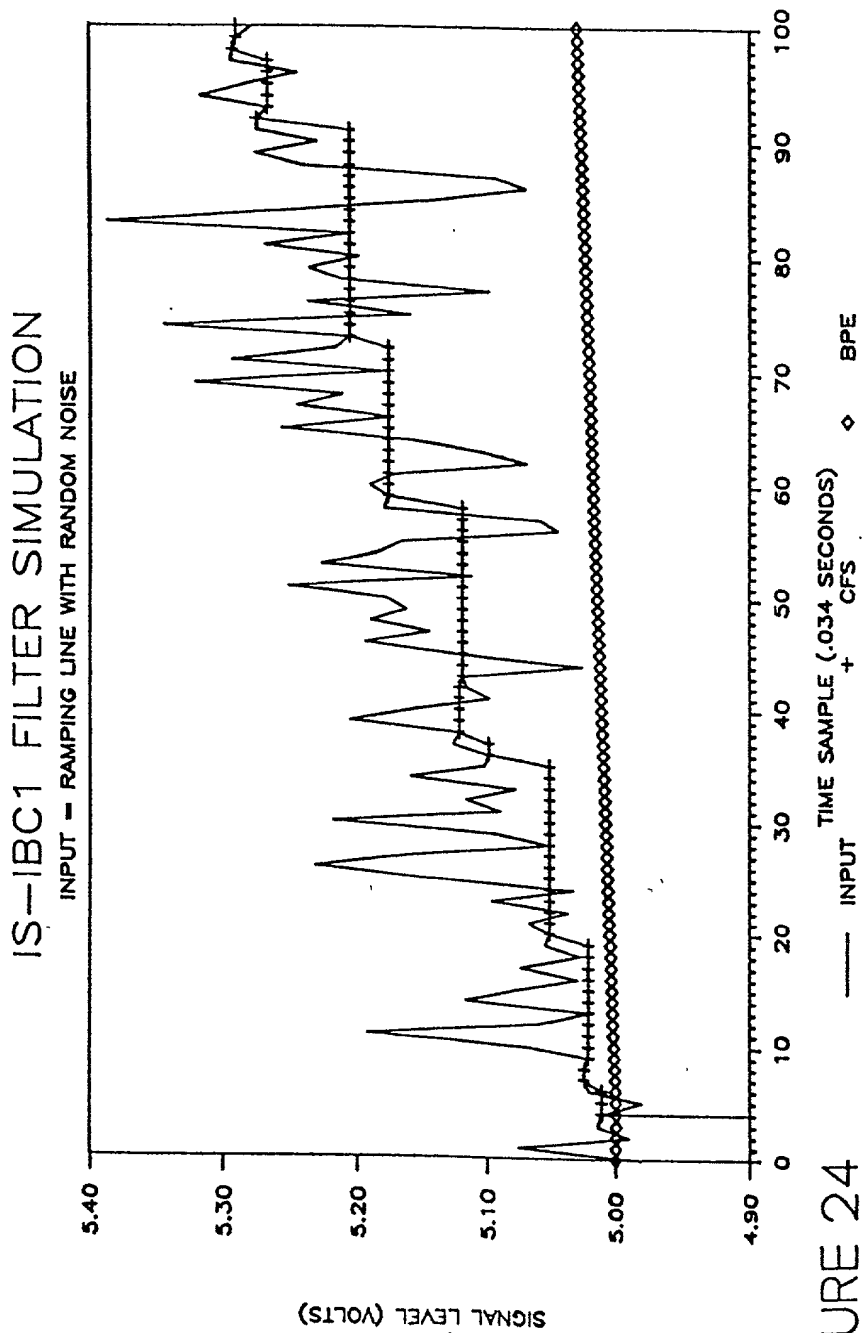


FIGURE 24

FIGURE 25A

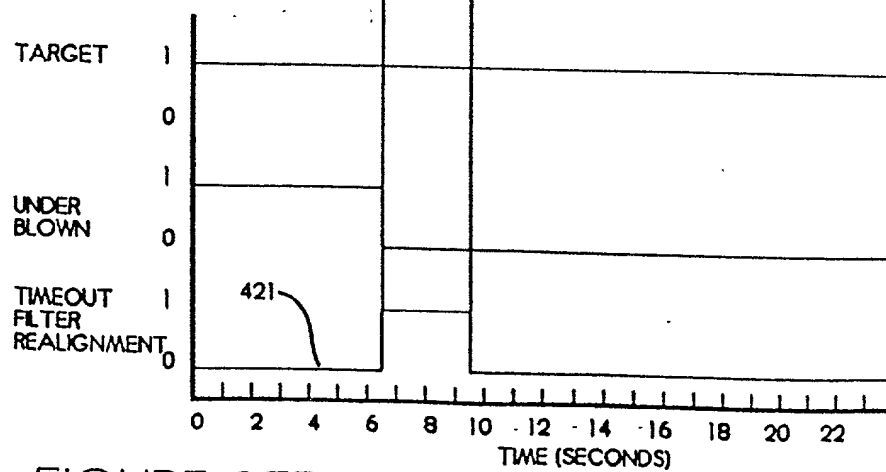
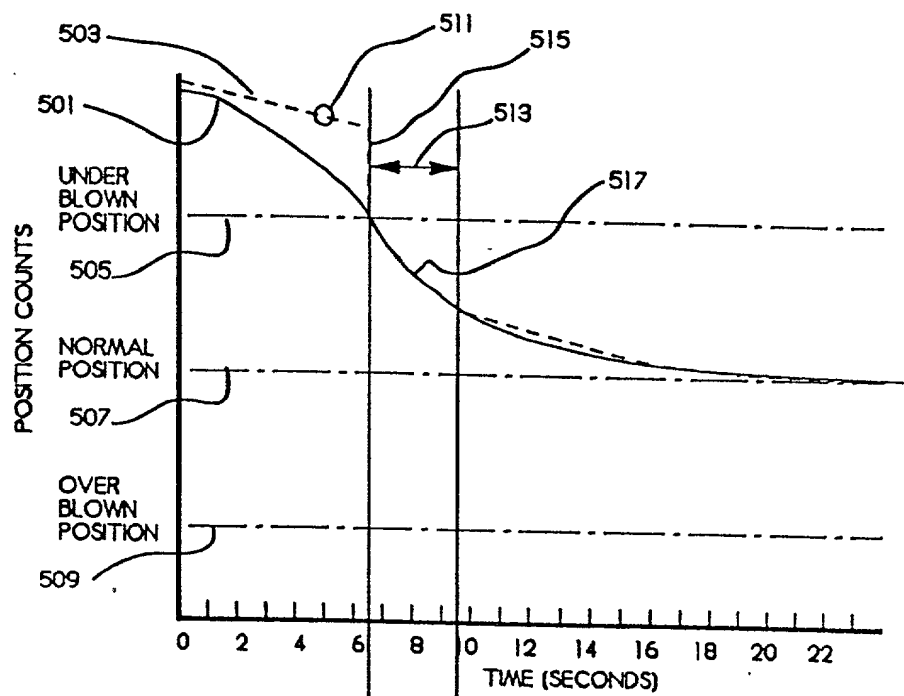


FIGURE 25B

FIGURE 26A

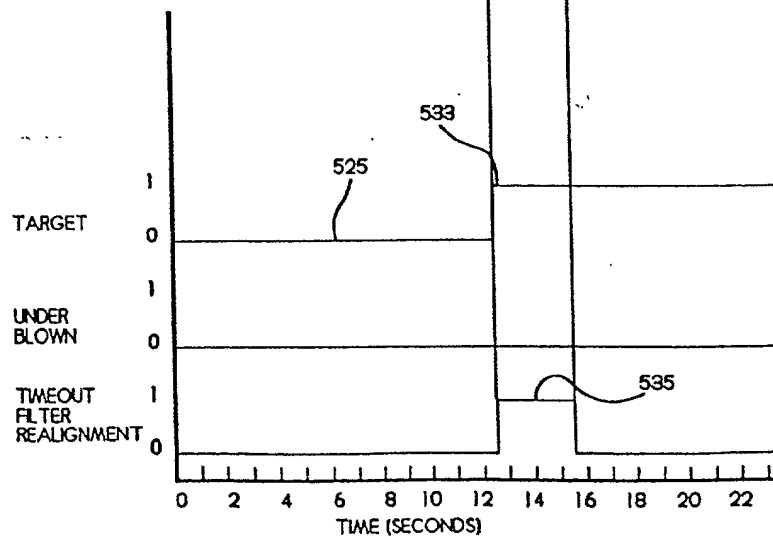
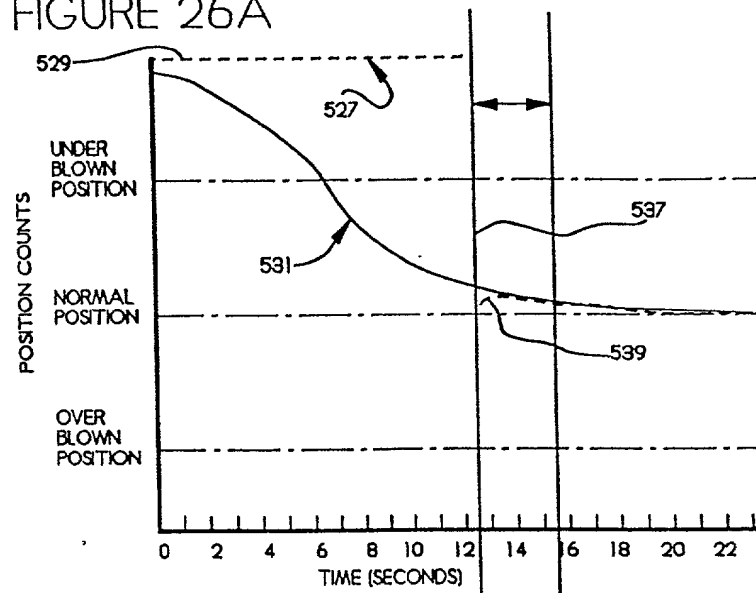


FIGURE 26B

FIGURE 27A

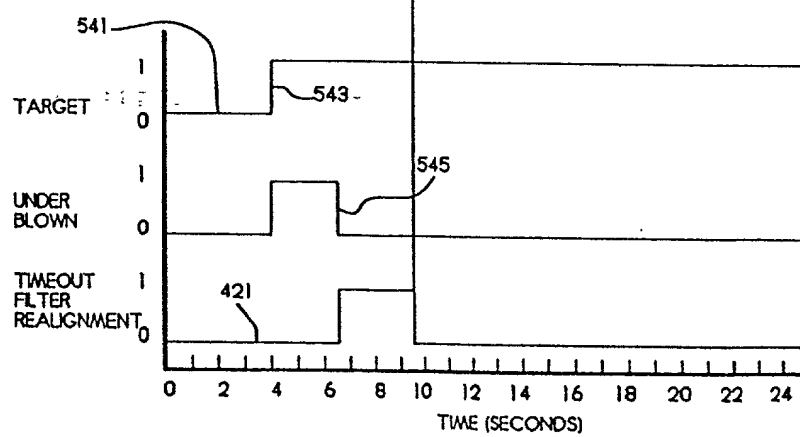
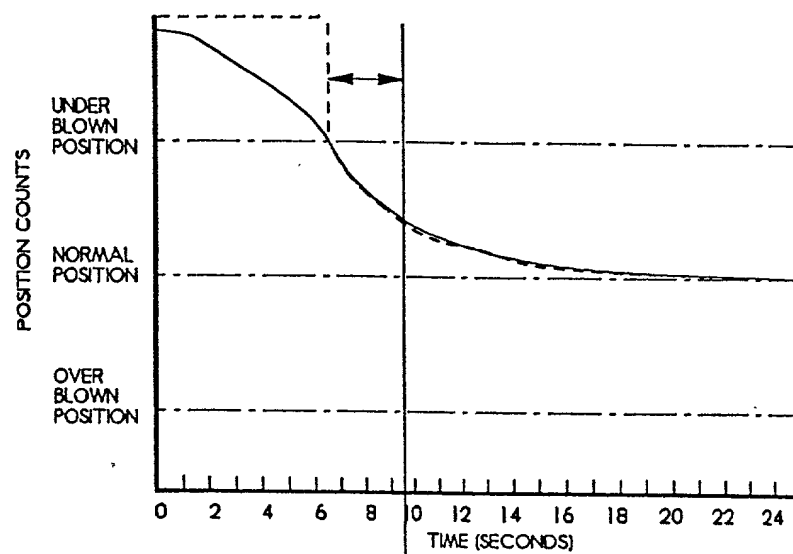


FIGURE 27B

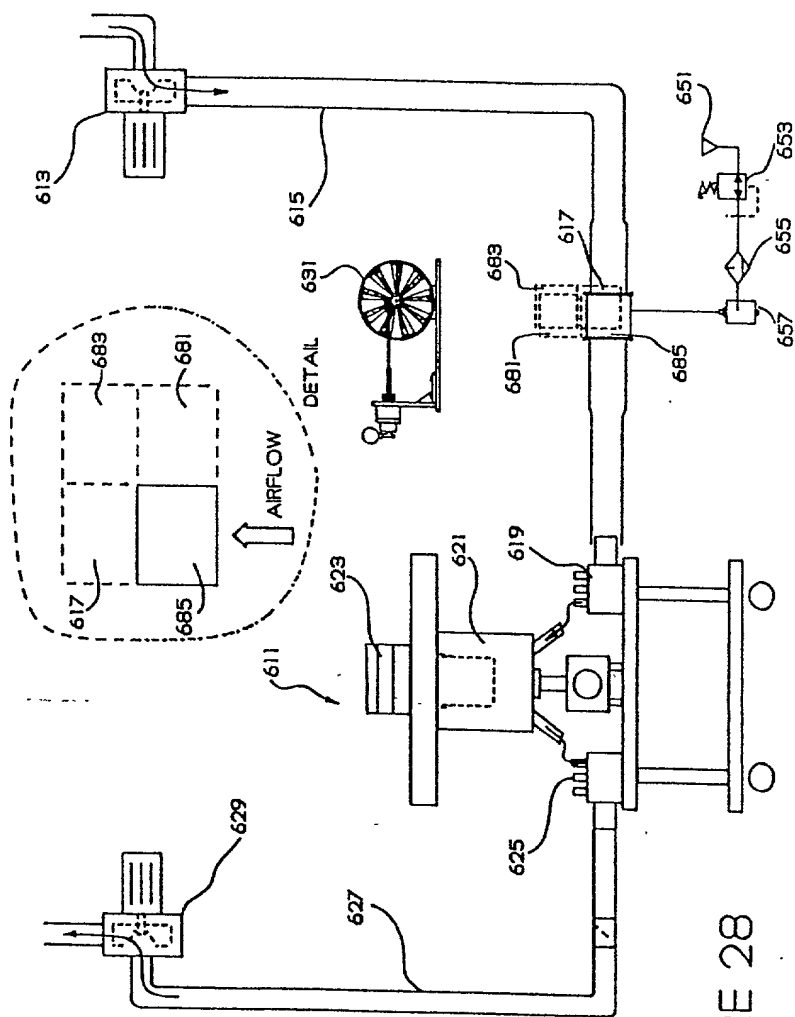


FIGURE 28

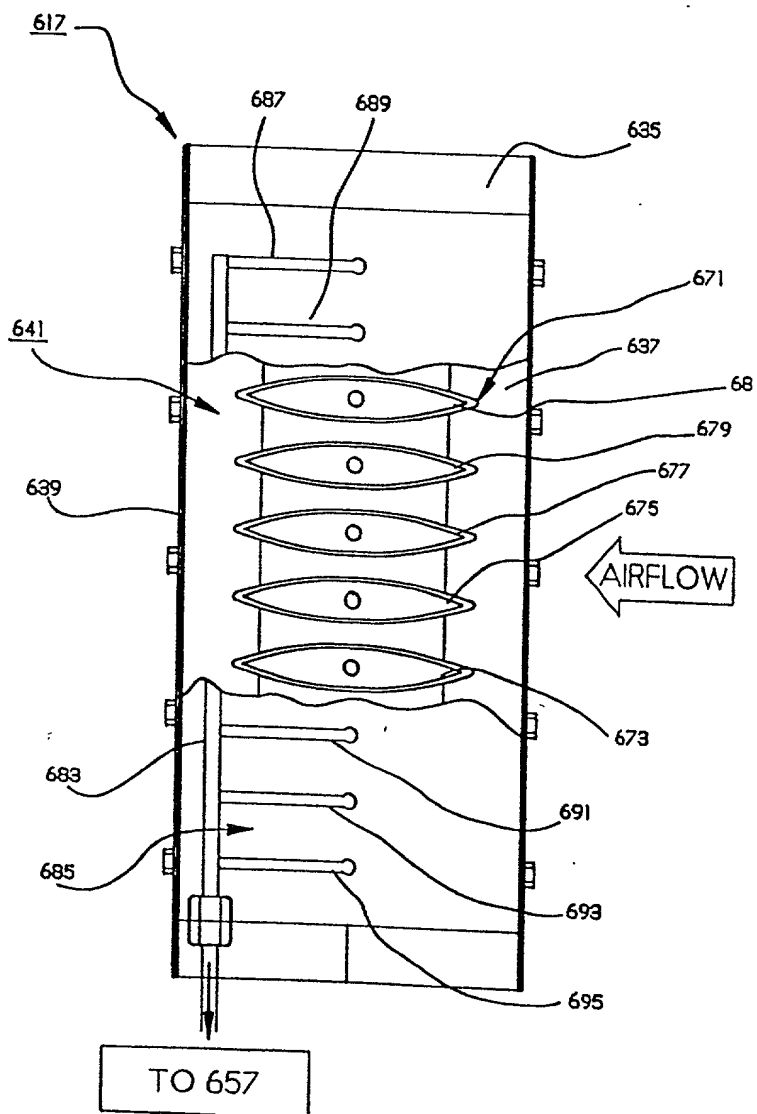


FIGURE 29

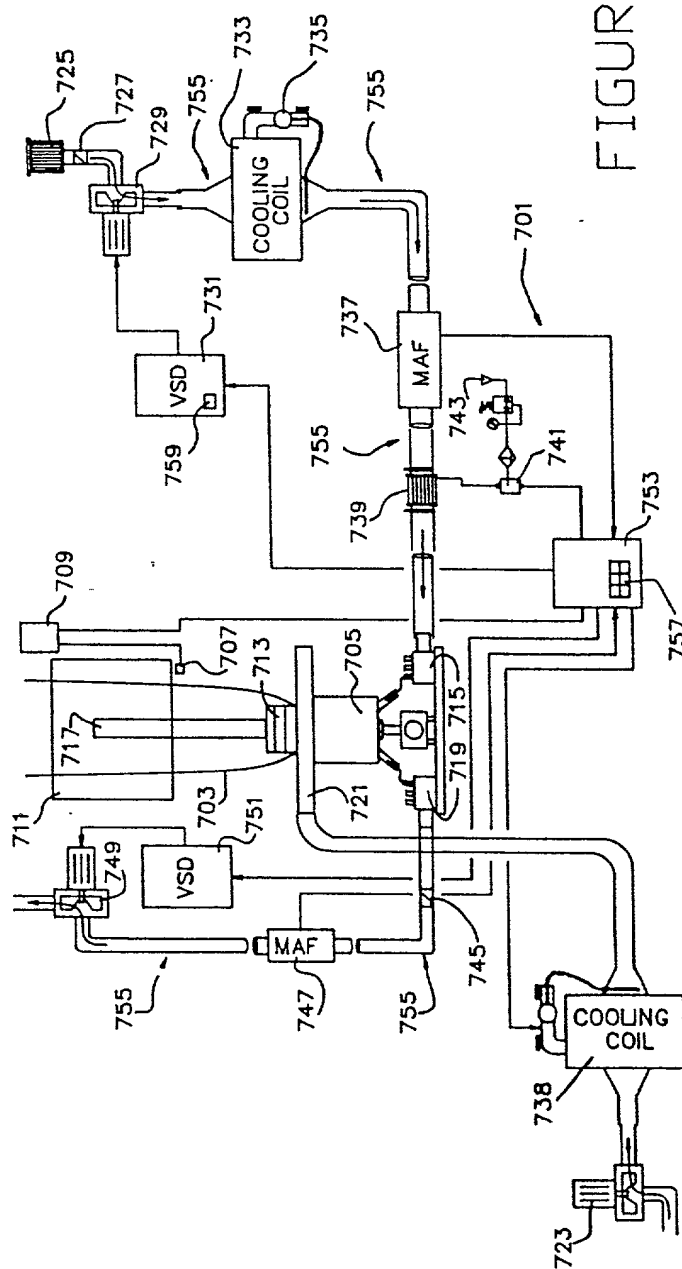


FIGURE 30

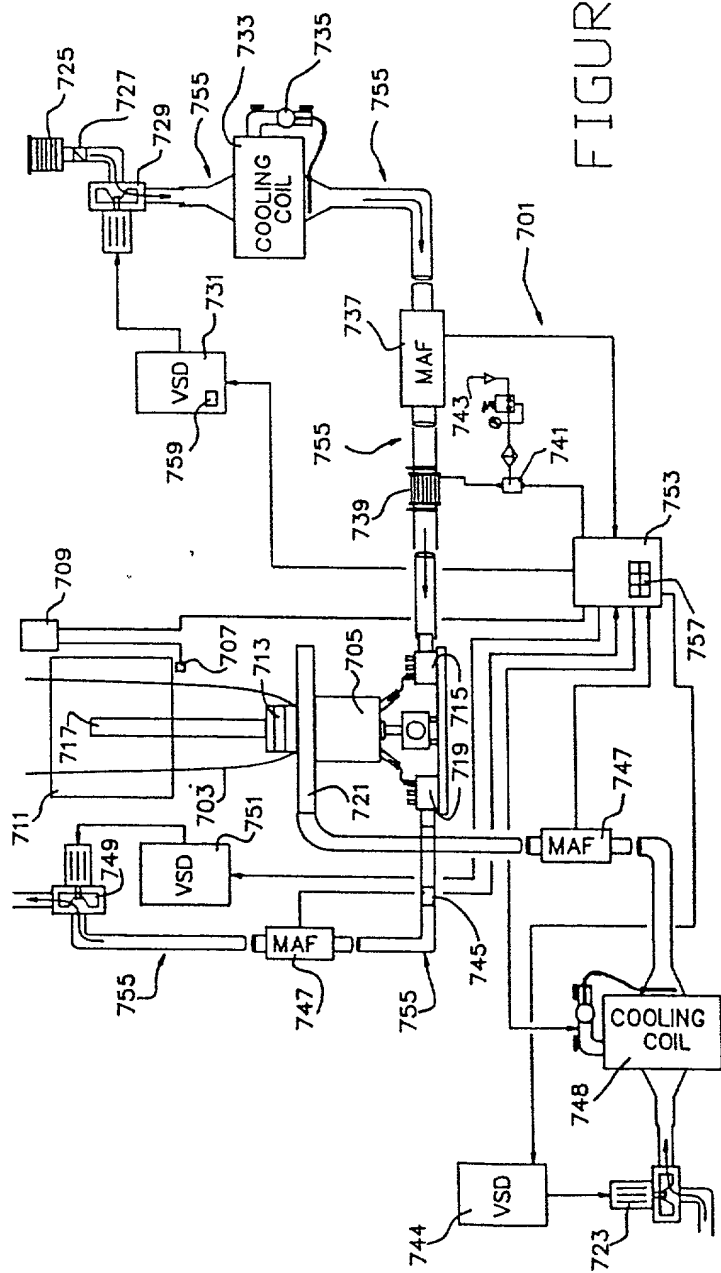


FIGURE 31

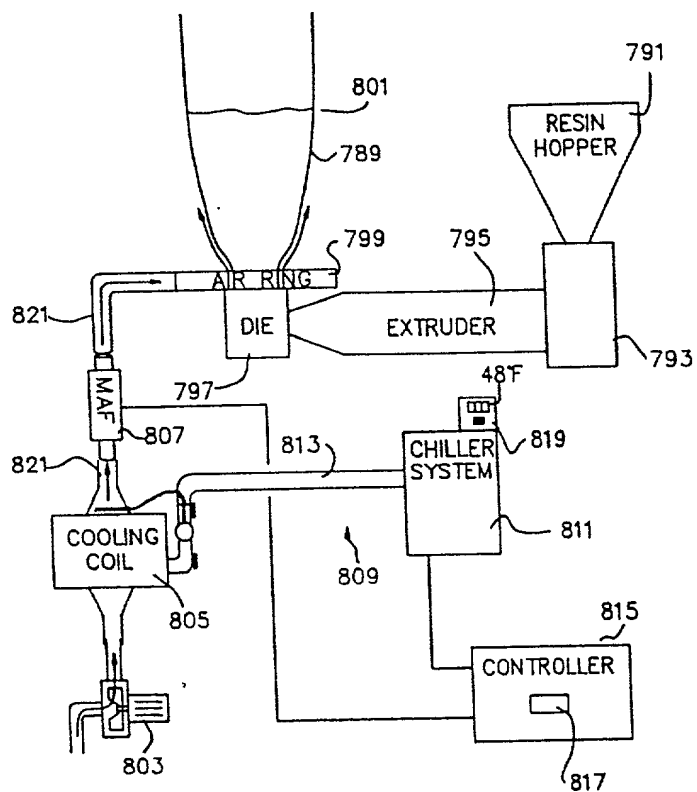


FIGURE 32

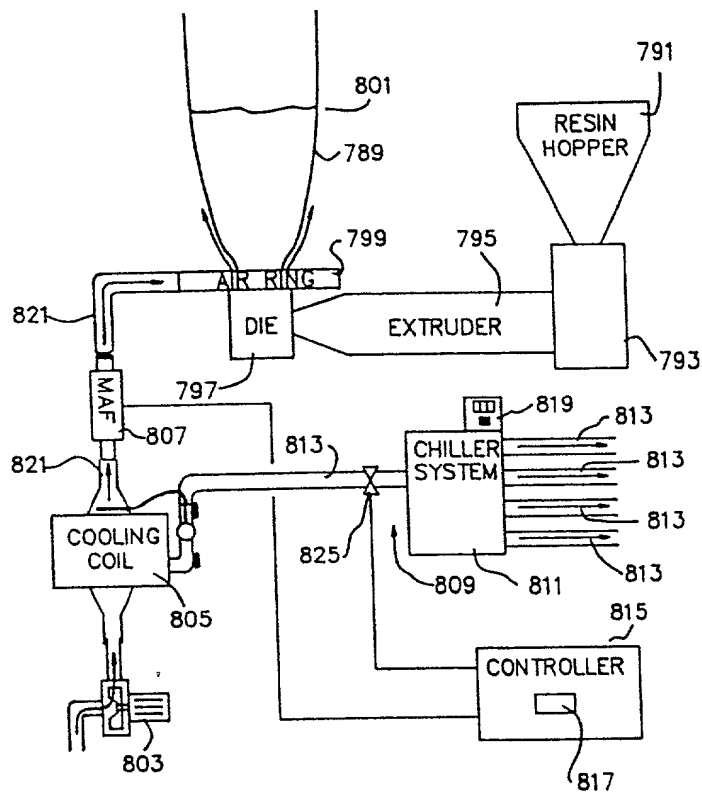


FIGURE 33

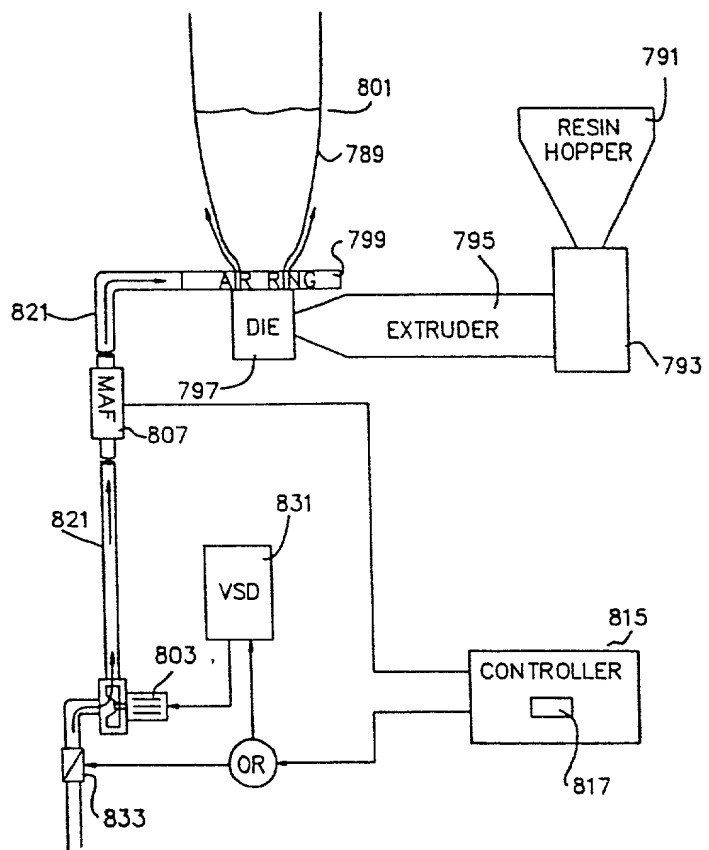


FIGURE 34

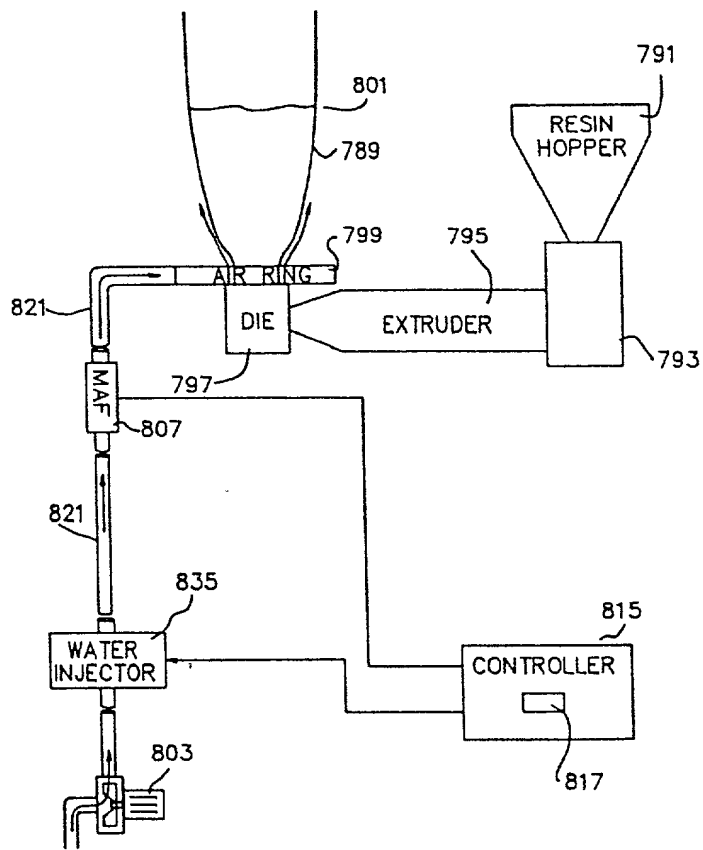


FIGURE 35

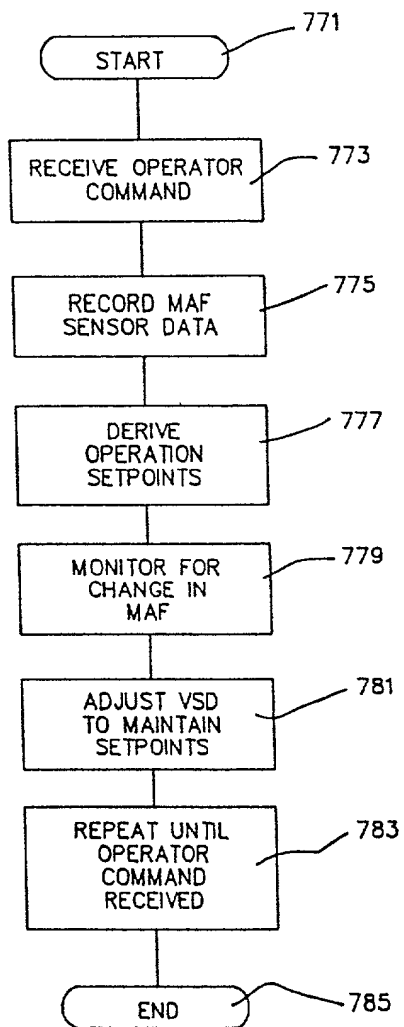


FIGURE 36

PATENT SKETCH FORM

Attorney _____

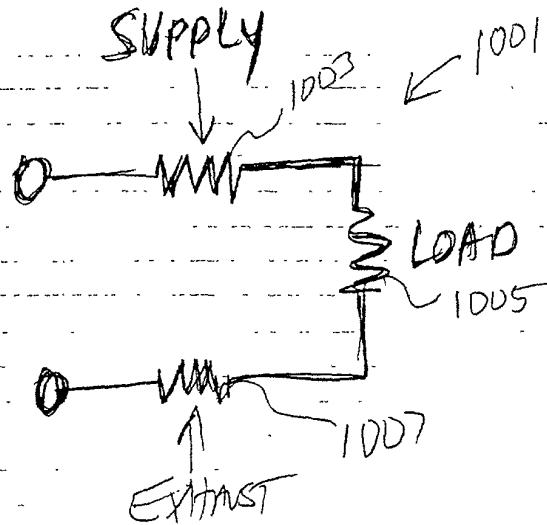


FIGURE 37A
(PRIOR ART)

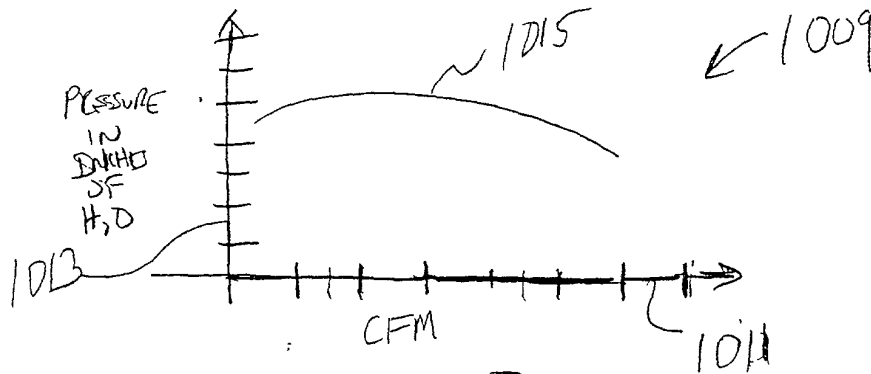


FIGURE 37B
(PRIOR ART)

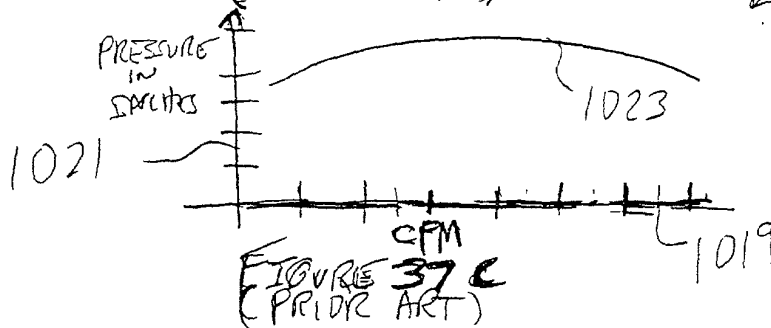
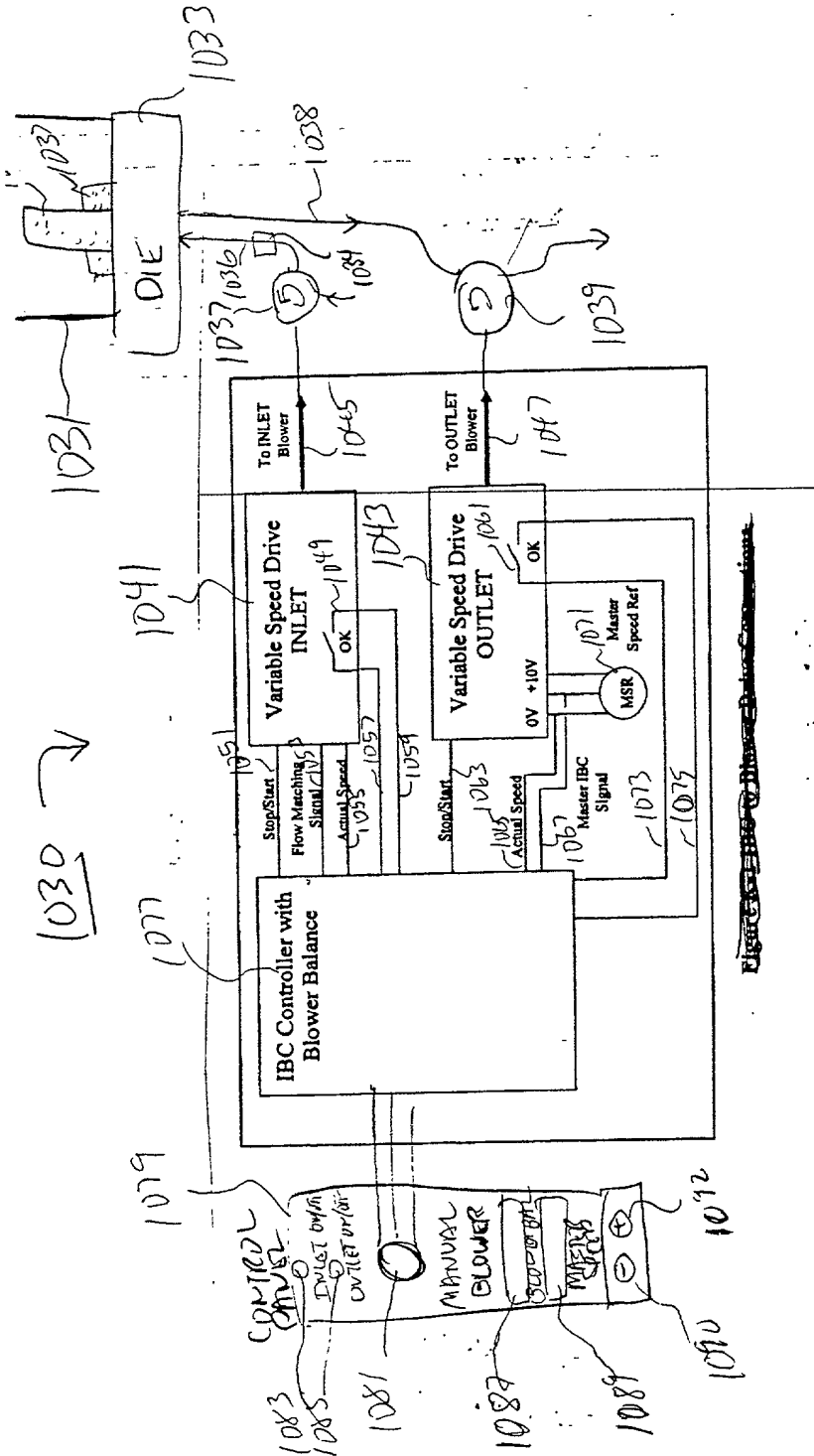


FIGURE 37C
(PRIOR ART)

PATENT SKETCH FORM

Attorney _____



PATENT SKETCH FORM

Attorney _____

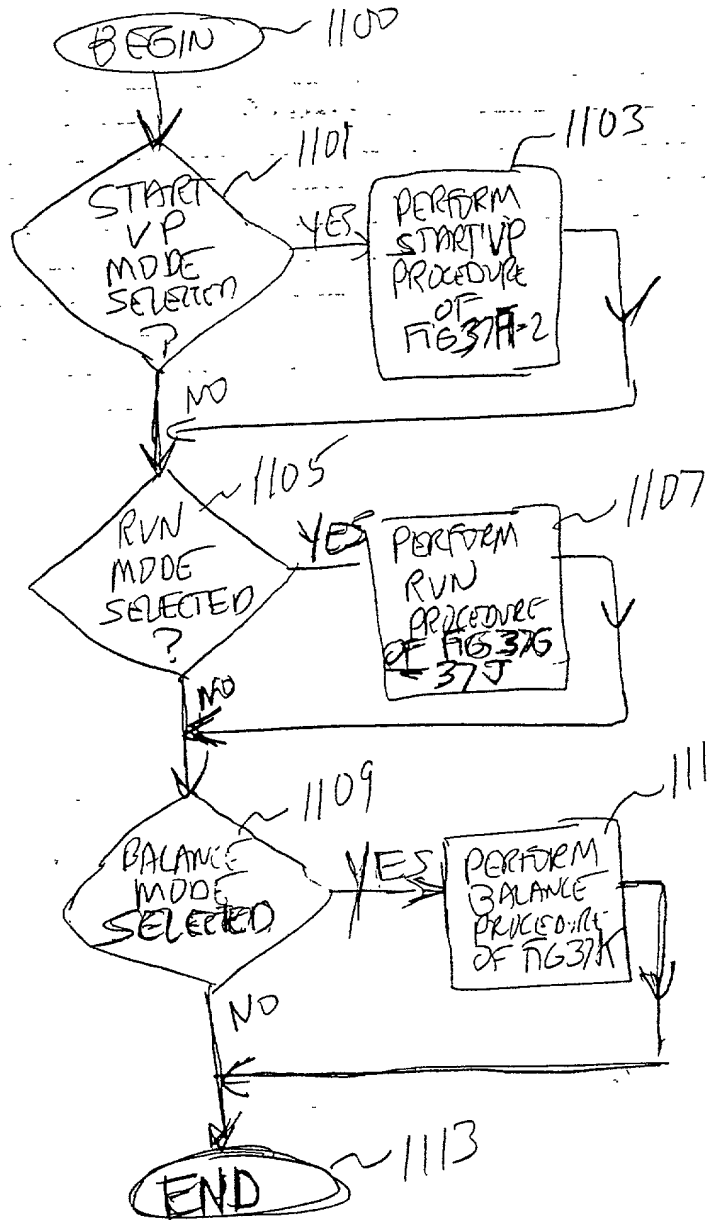


FIGURE 37E

PATENT SKETCH FORM

Attorney _____

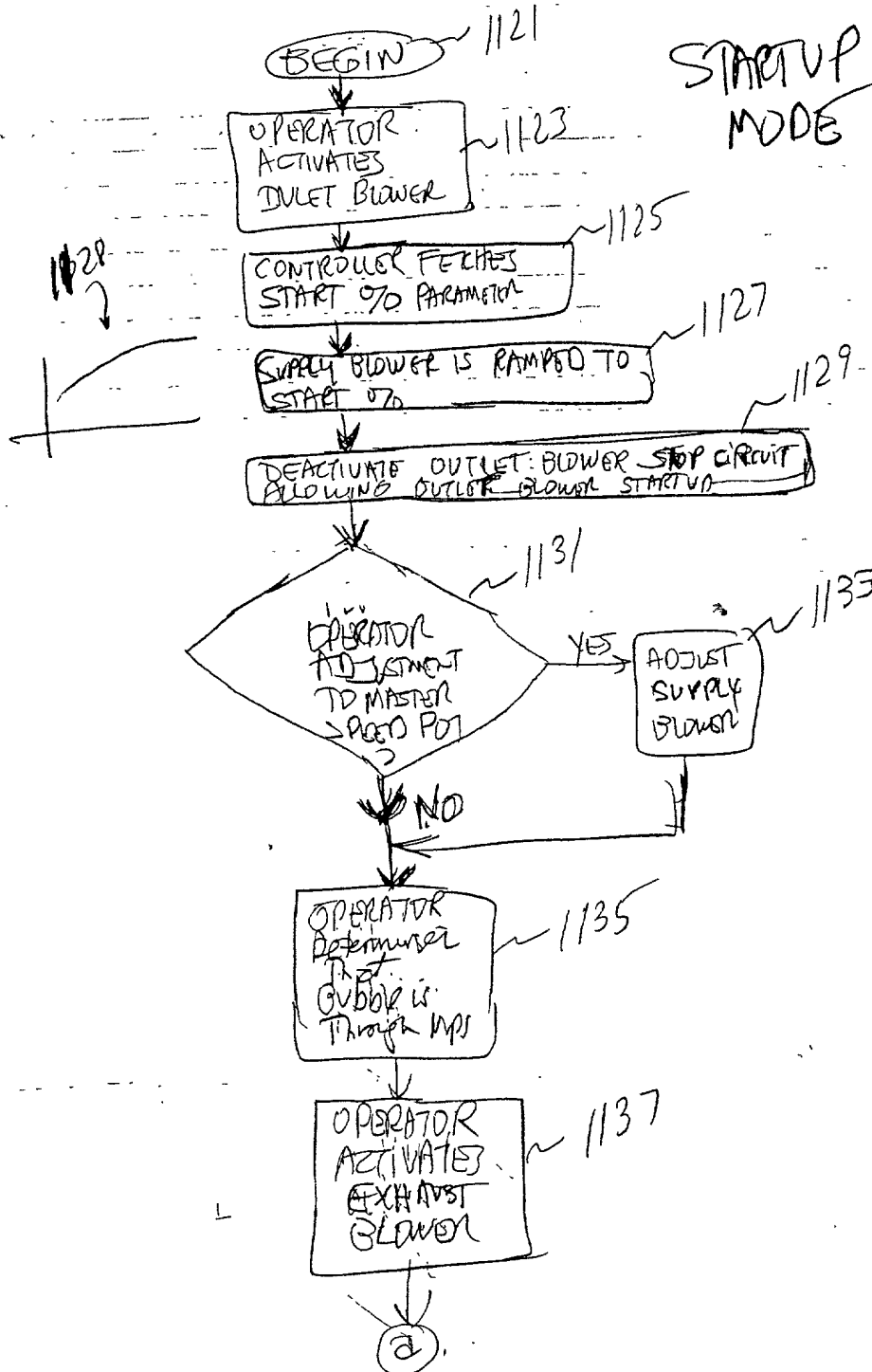


FIG 37 F

PATENT SKETCH FORM

Attorney _____

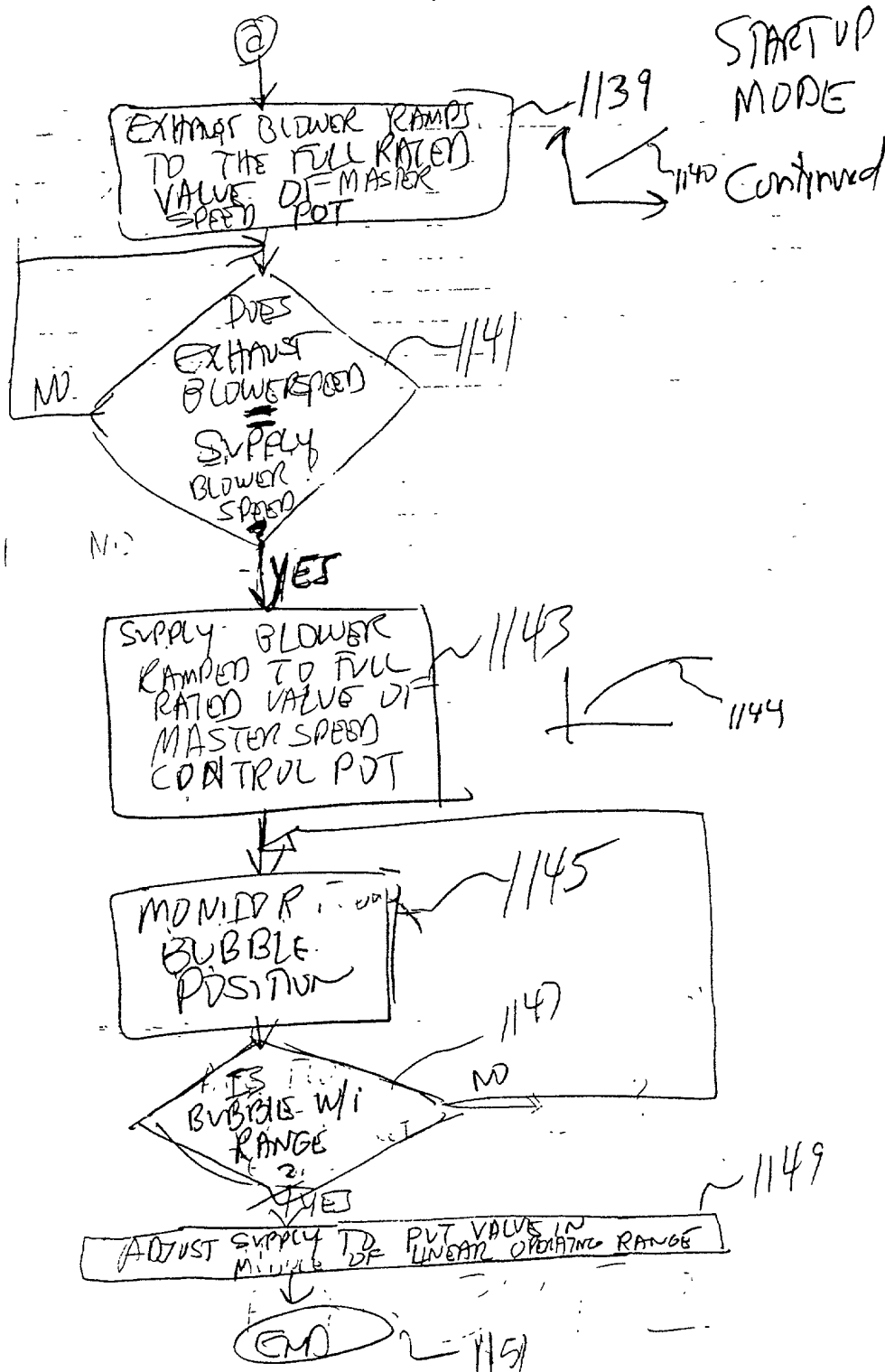


FIGURE 37 F2

PATENT SKETCH FORM

Attorney _____

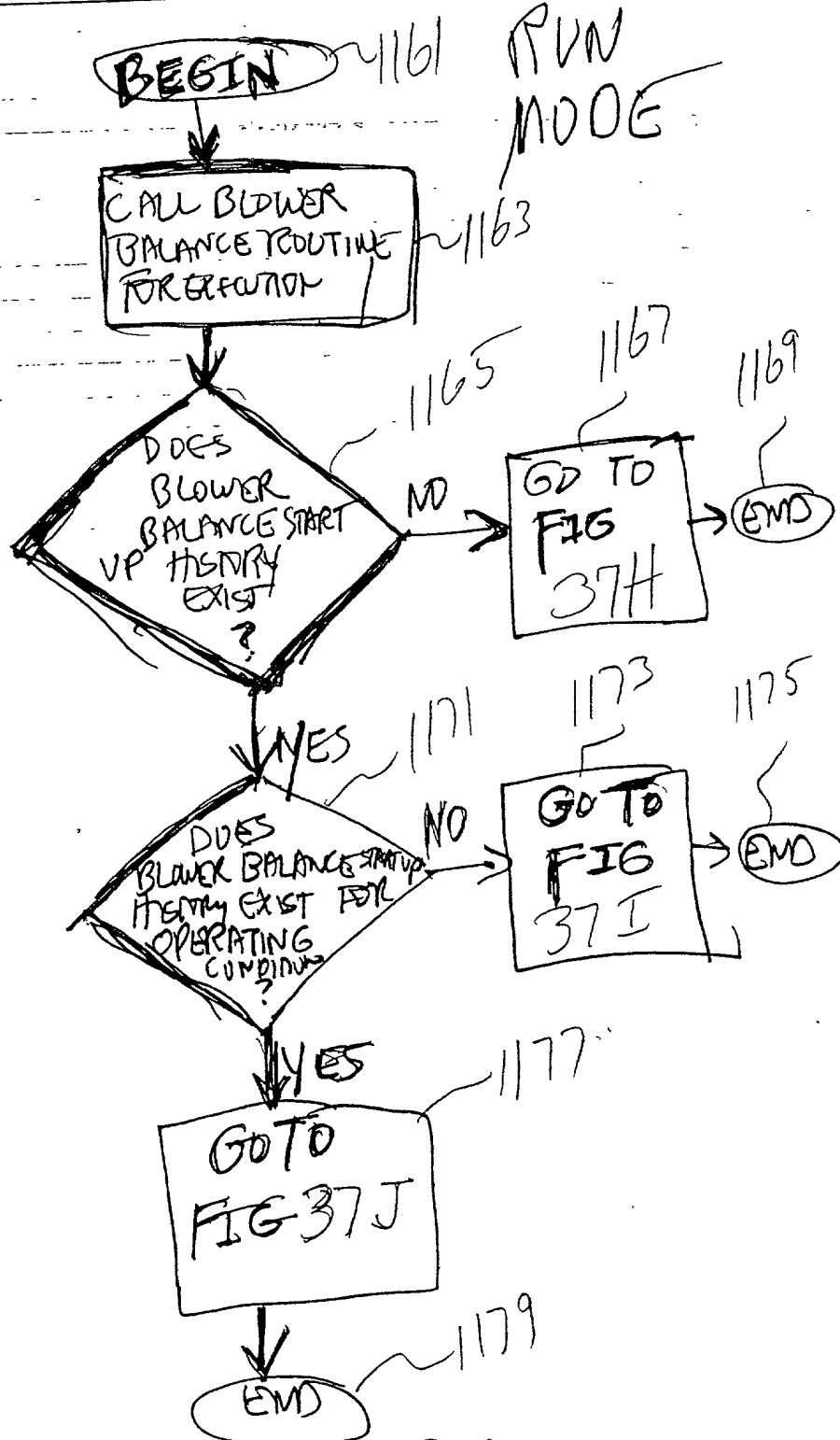


FIGURE 37G

PATENT SKETCH FORM

Attorney _____

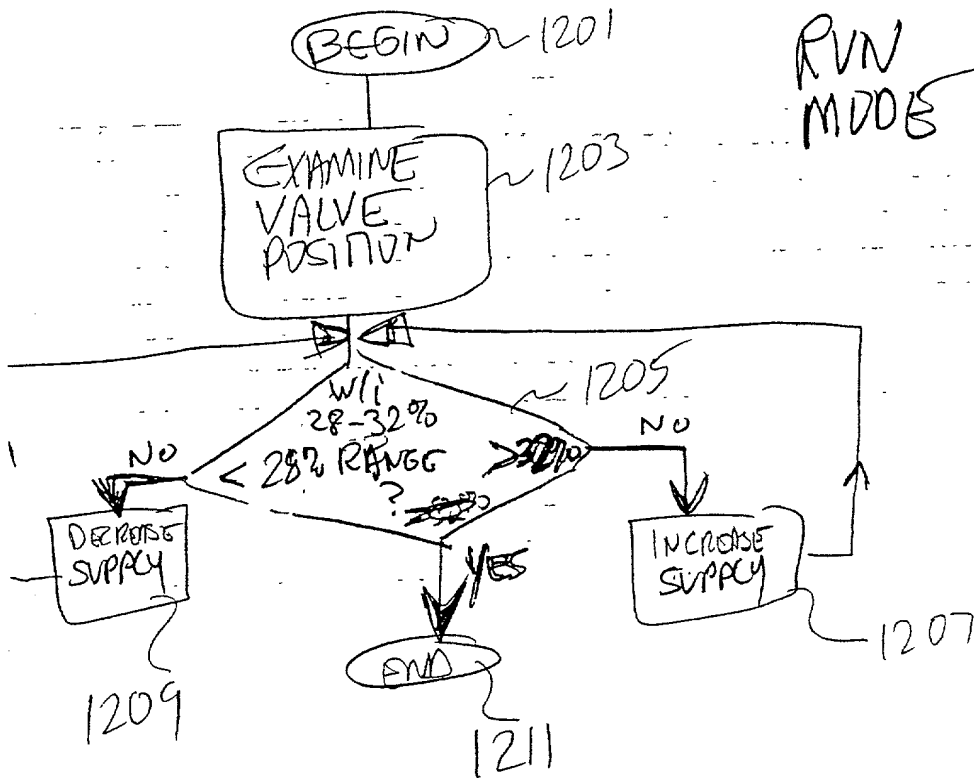


FIGURE 3TH

PATENT SKETCH FORM

Attorney _____

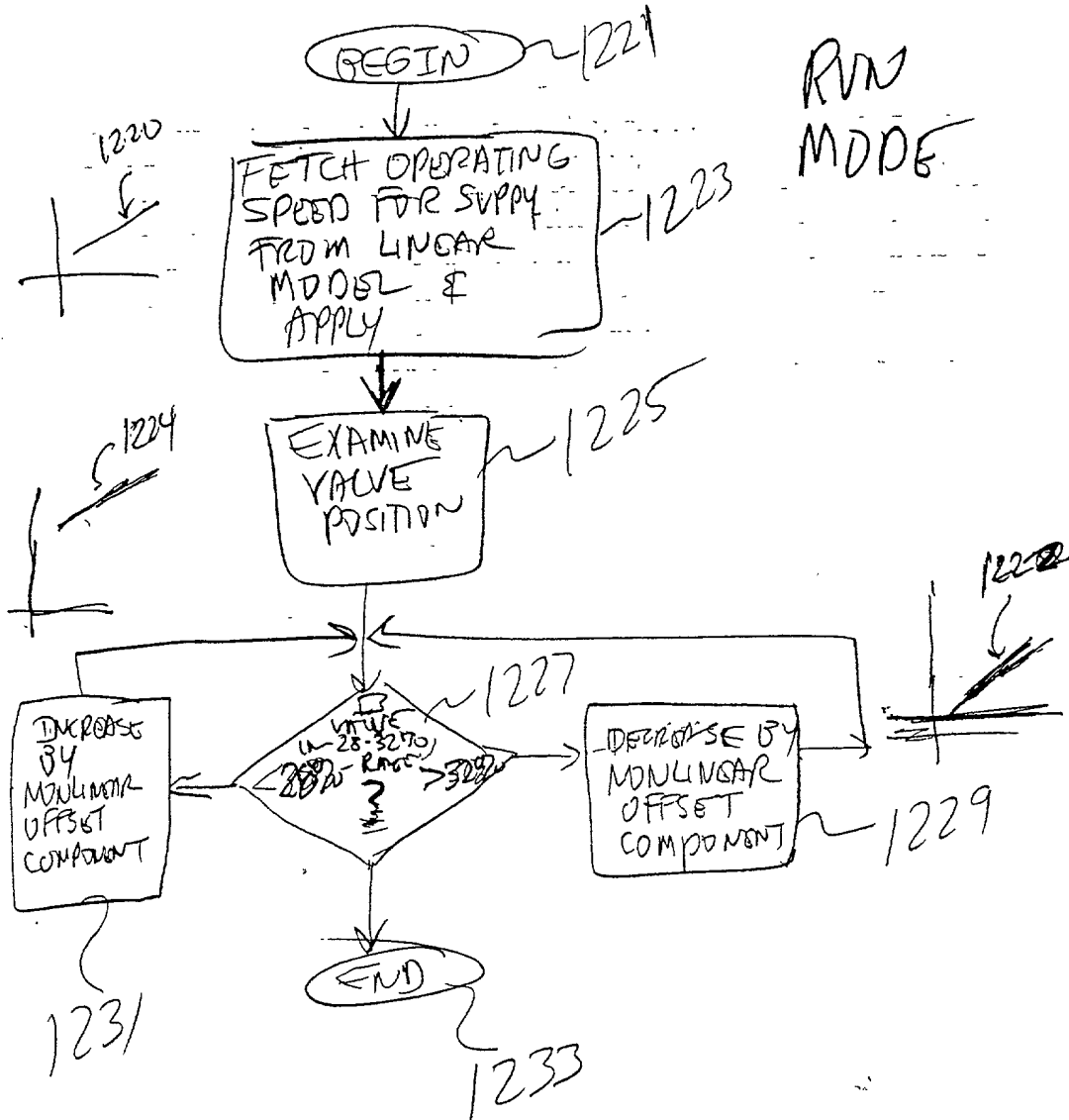


FIGURE 37 I

PATENT SKETCH FORM

Attorney _____

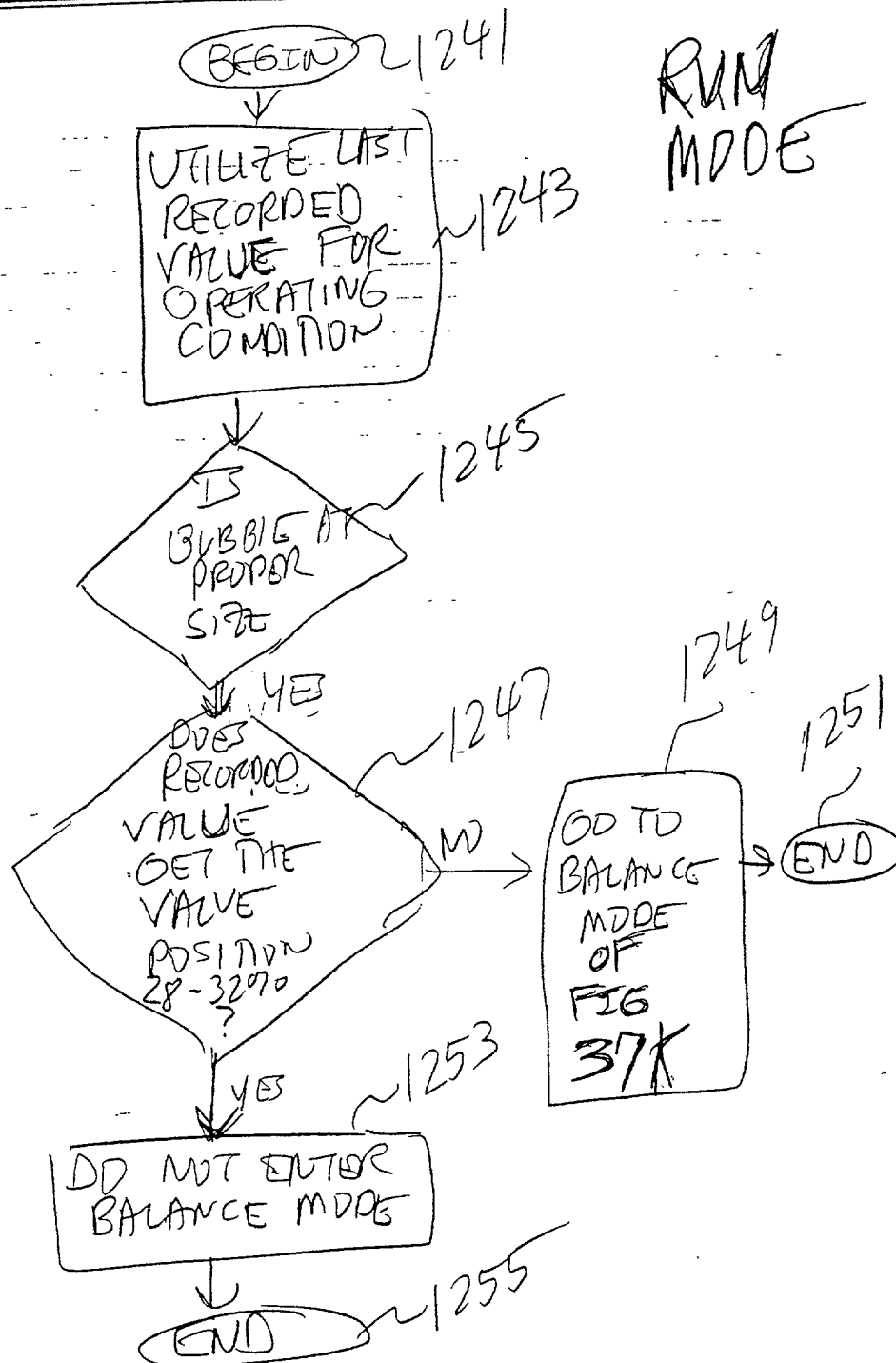


FIGURE 37J

PATENT SKETCH FORM

Attorney _____

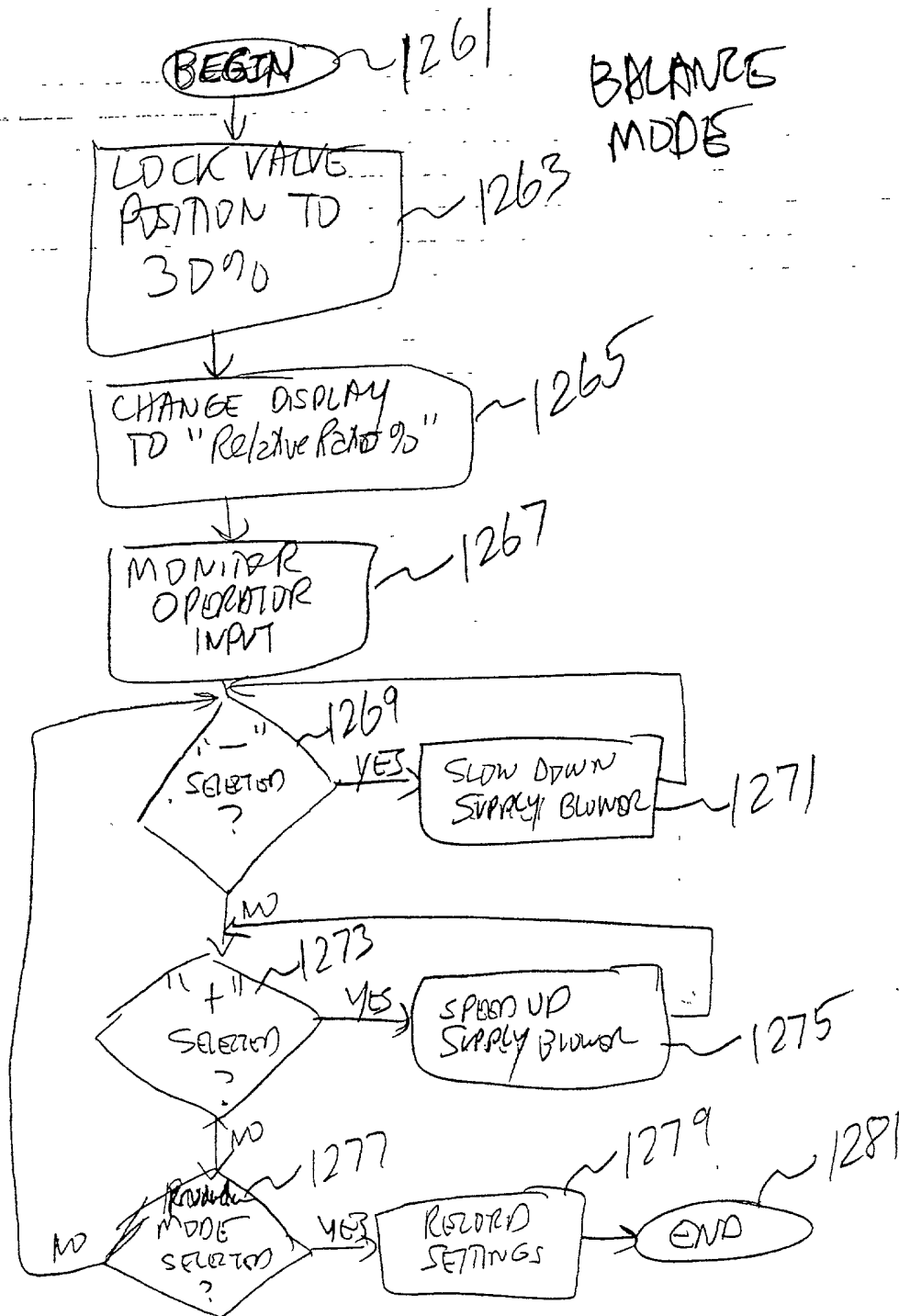


FIGURE 37K

PATENT SKETCH FORM

Attorney _____

1301 MASTER SPEED POT SETTING	1303 (SUPPLY SPEED)	1305 REFERENCE VOLTS
A 70	AC	BD
B 90	AG	BF
⋮		
Z 0%	AM	BX

FIGURE 37L

PATENT SKETCH FORM

Attorney _____

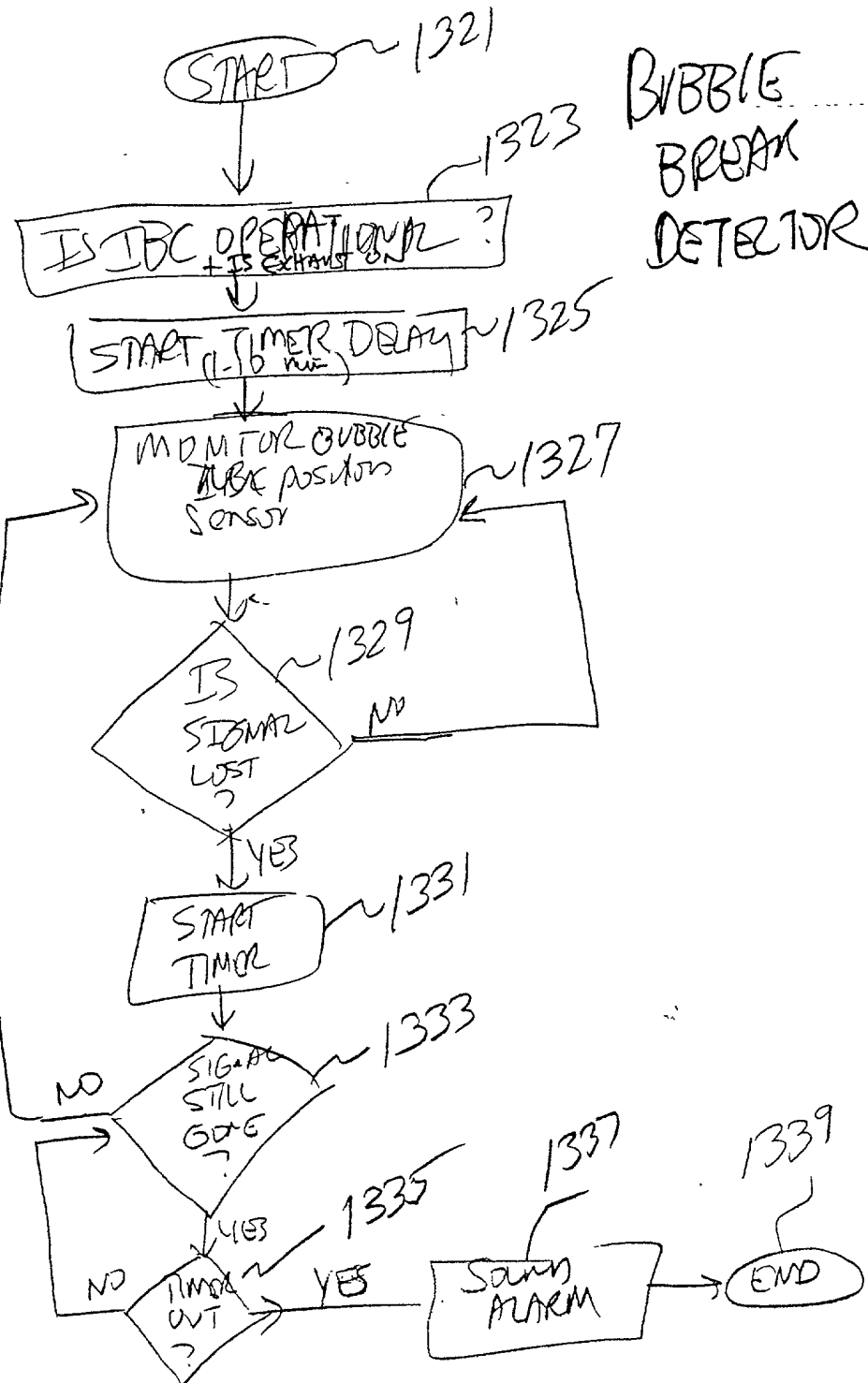
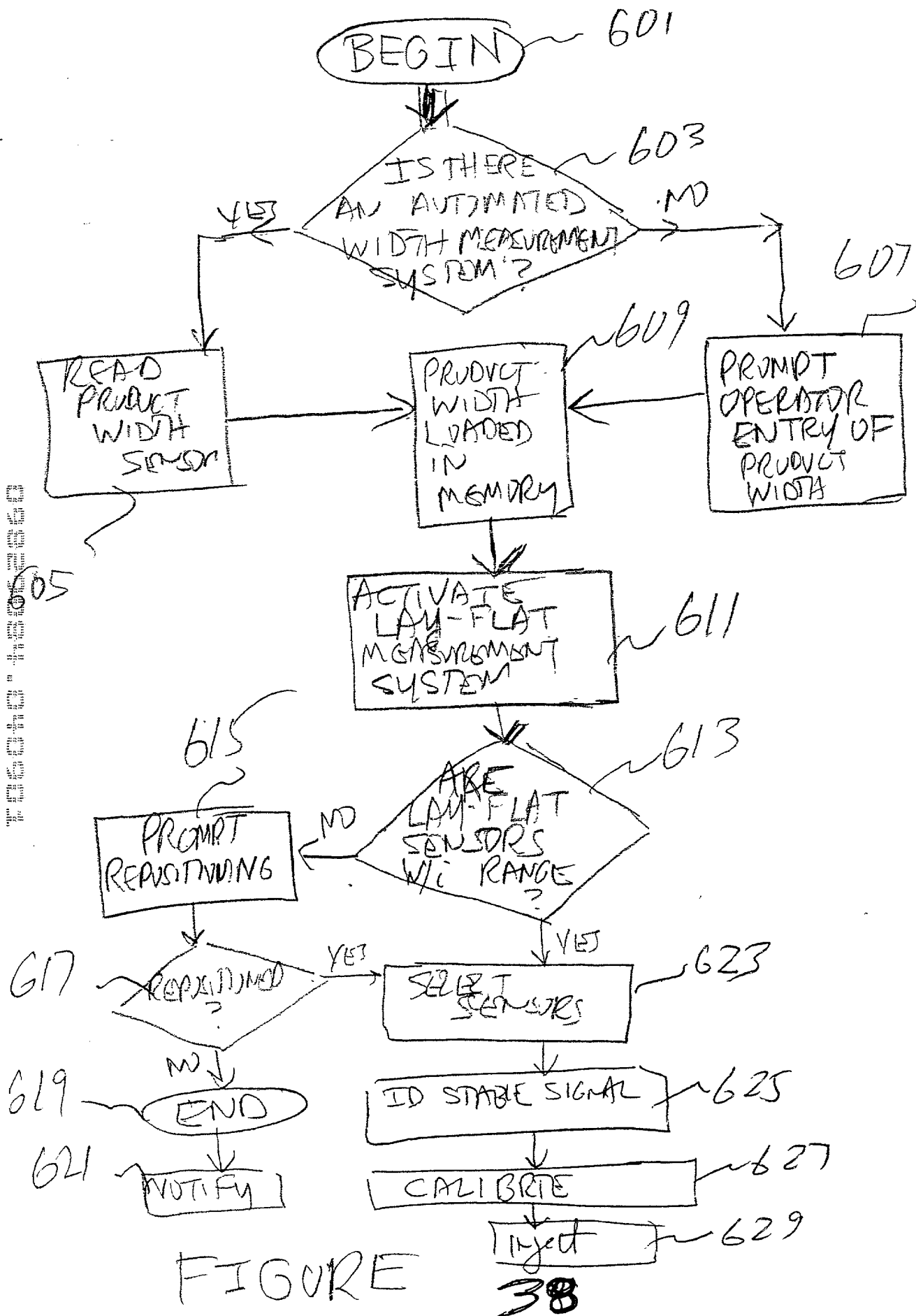


FIGURE 37M



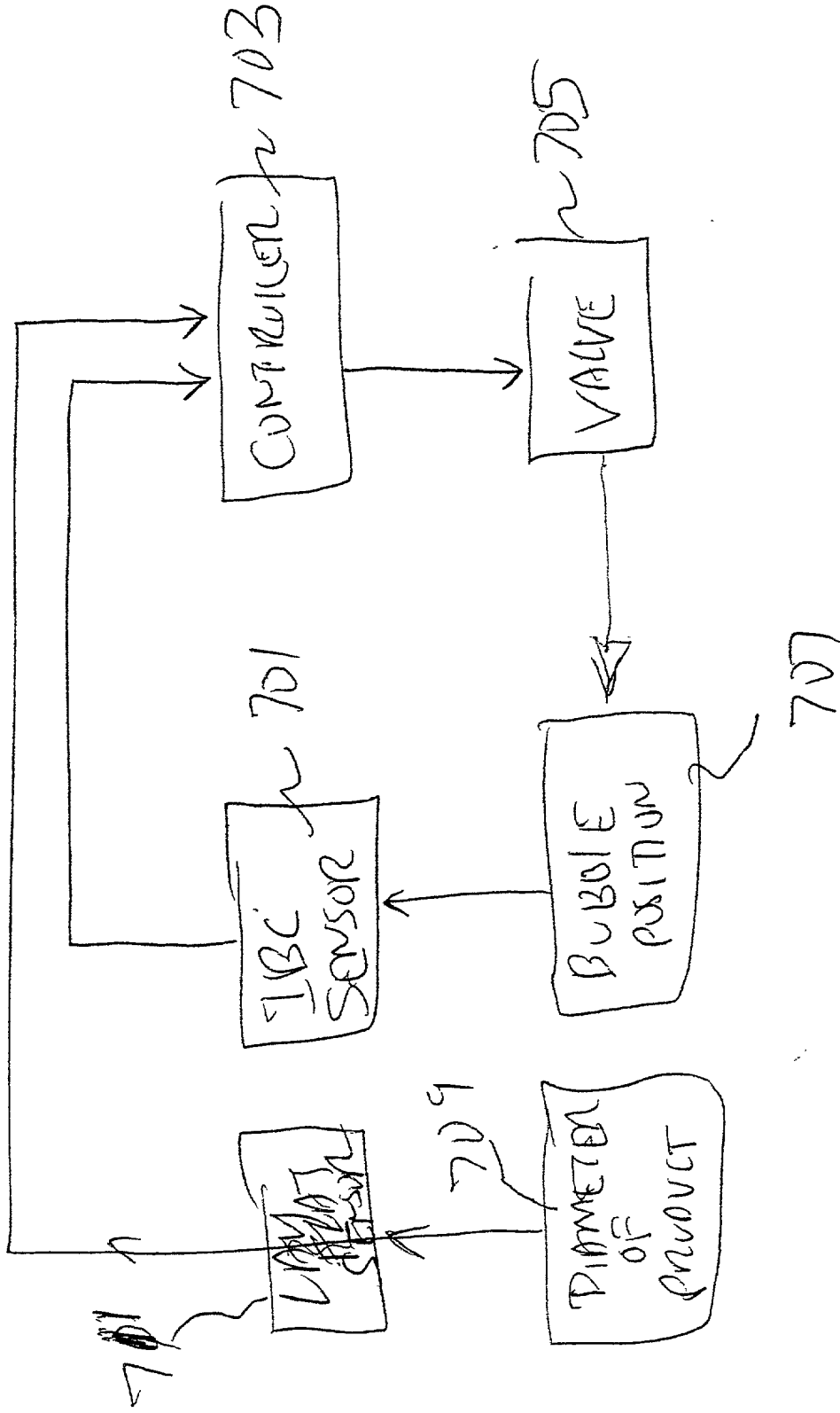


Figure 39

FIGURE 40

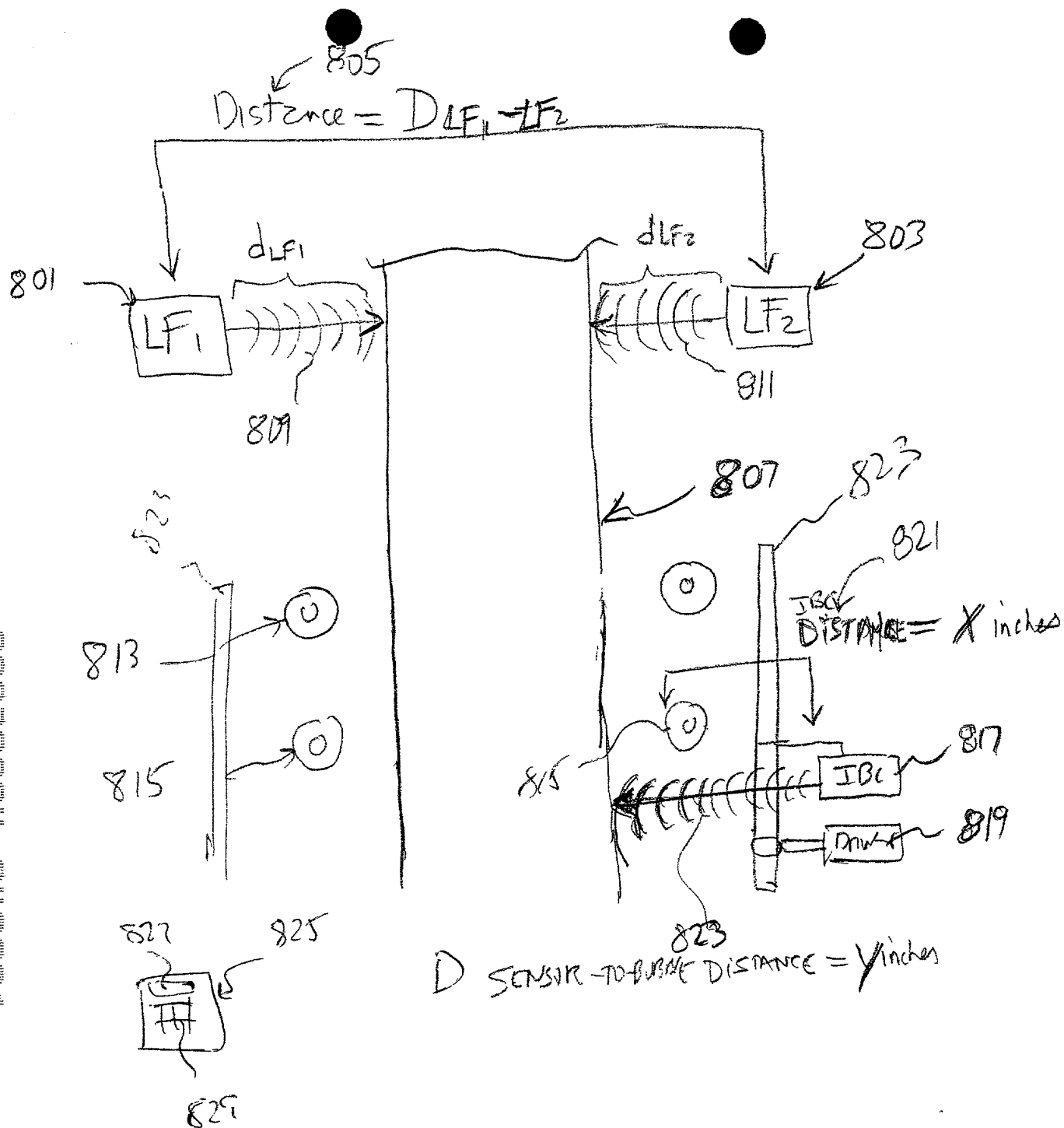


FIGURE 40

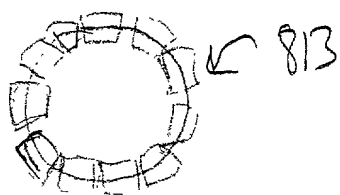


FIGURE 41

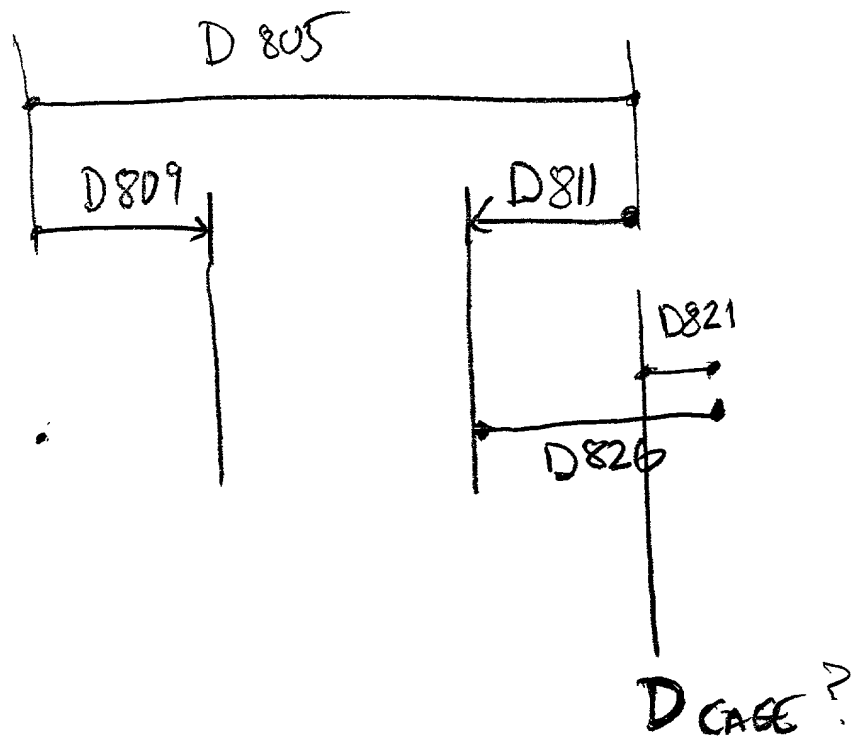


FIG 423

$$D_{CAGE} = (D805 - D809 - D811) + (D826 - D821)$$

TURNING MODE

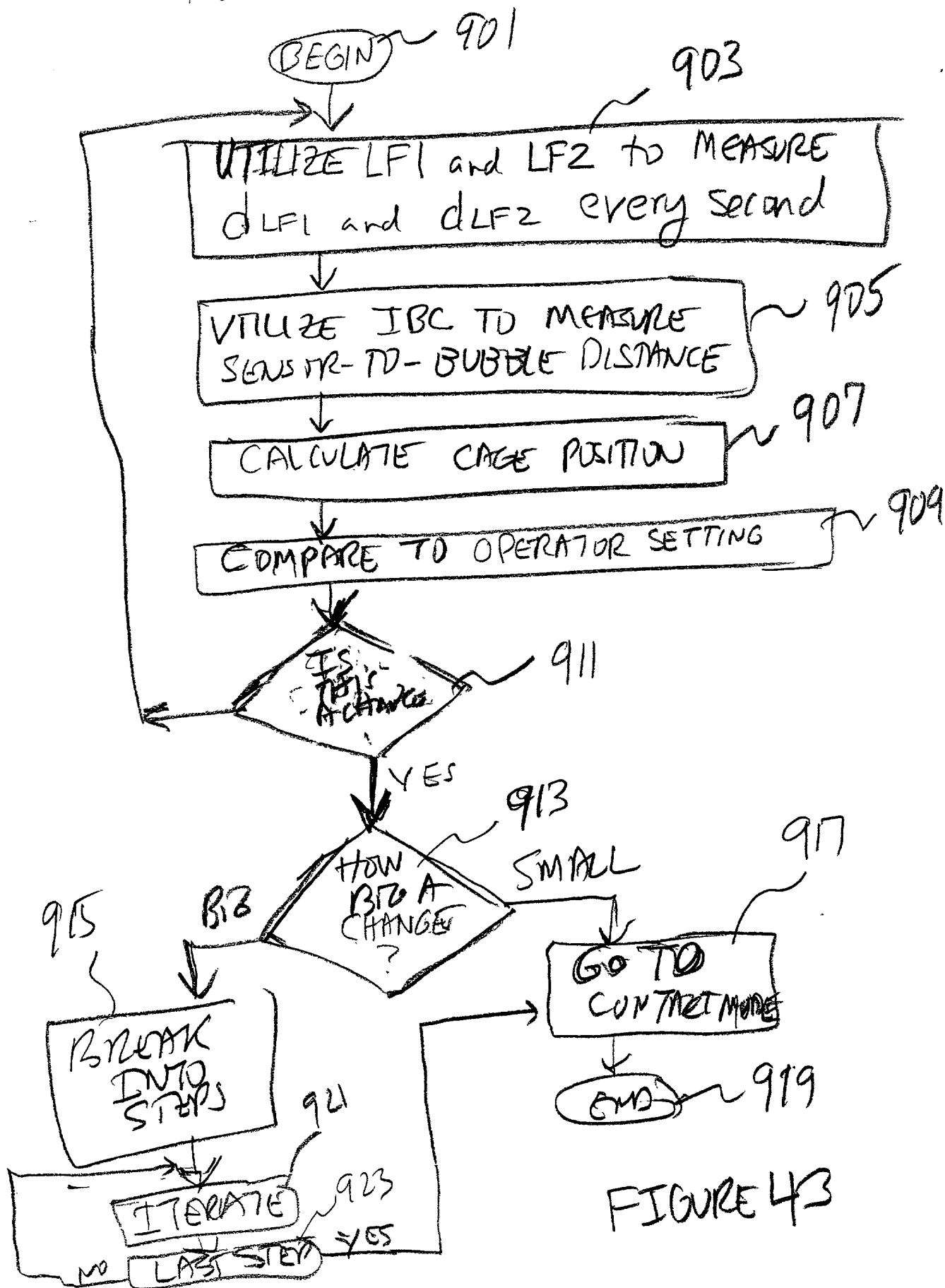


FIGURE 43

This Routine Runs
only when Echo loss occurs

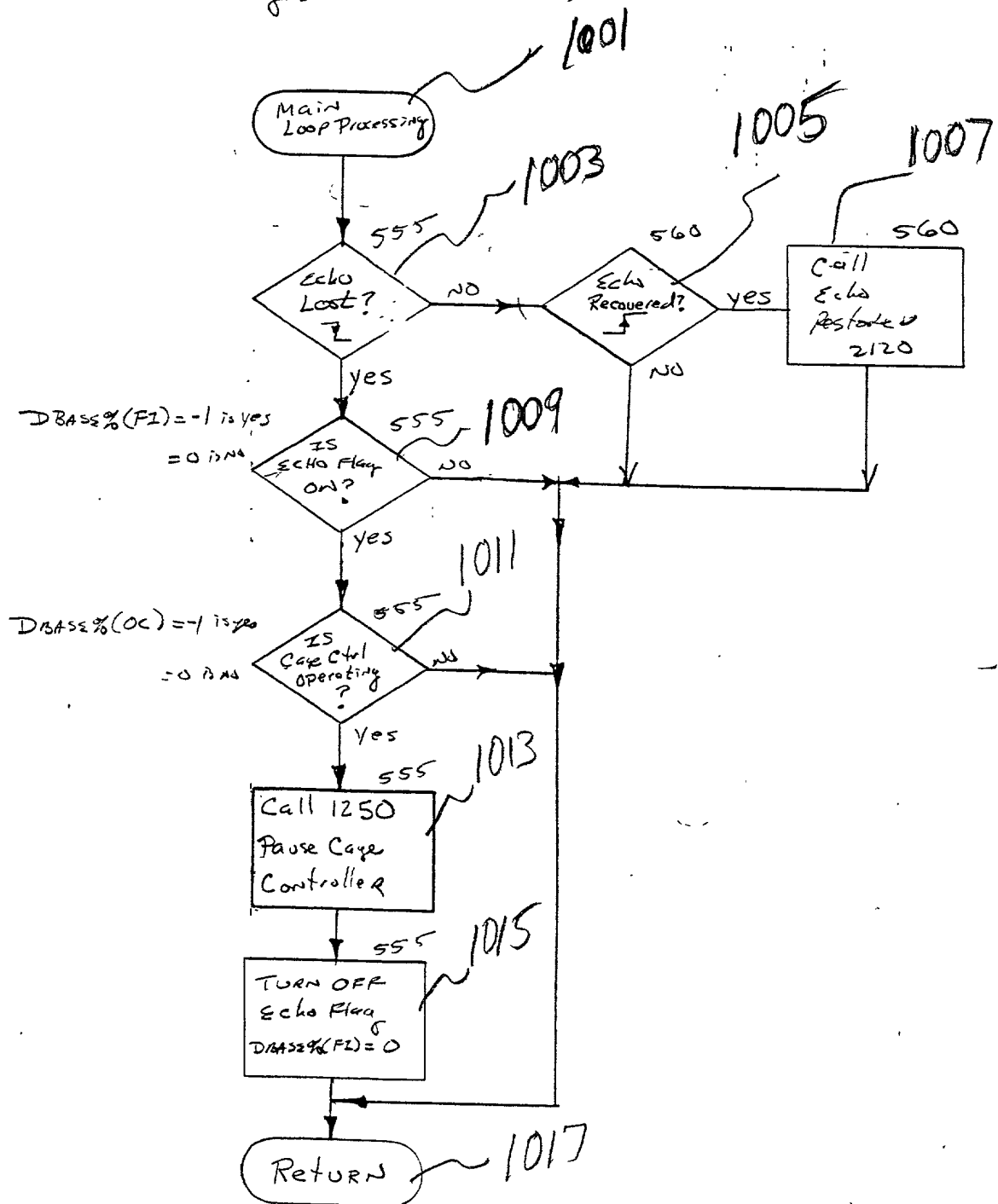


FIGURE 44A

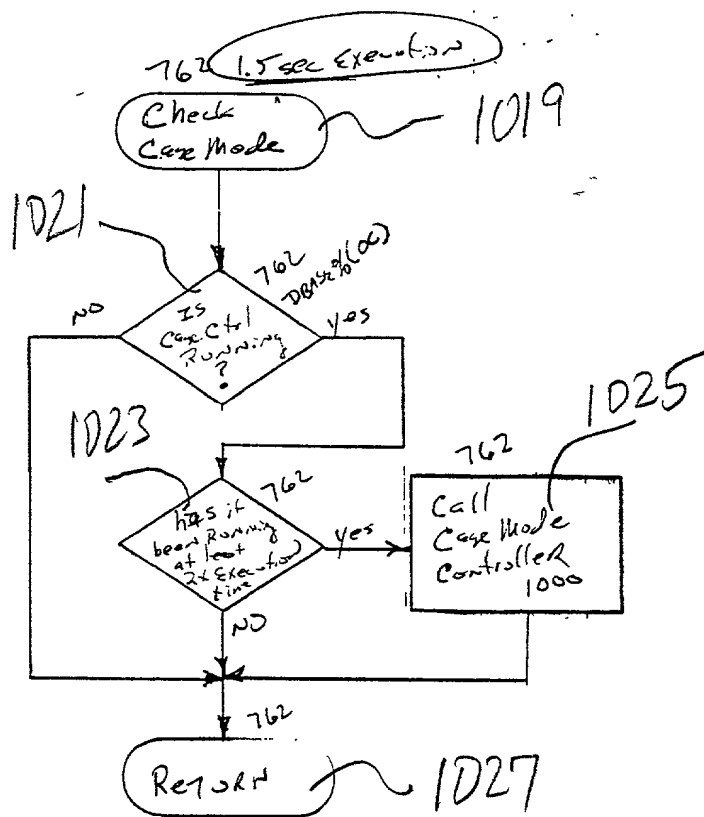
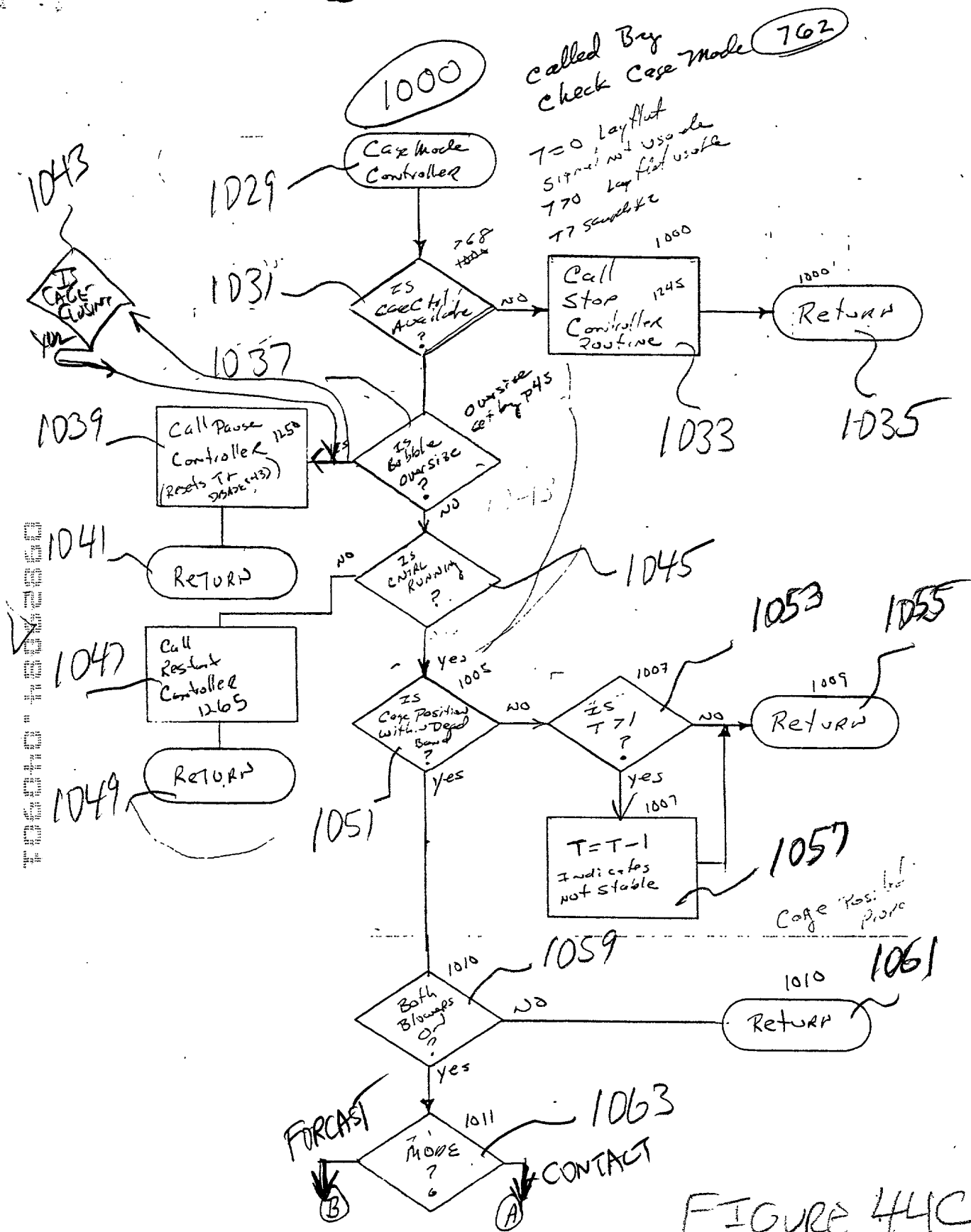


FIGURE 44B



1065 1067 1069 1071 1073 1075 1077

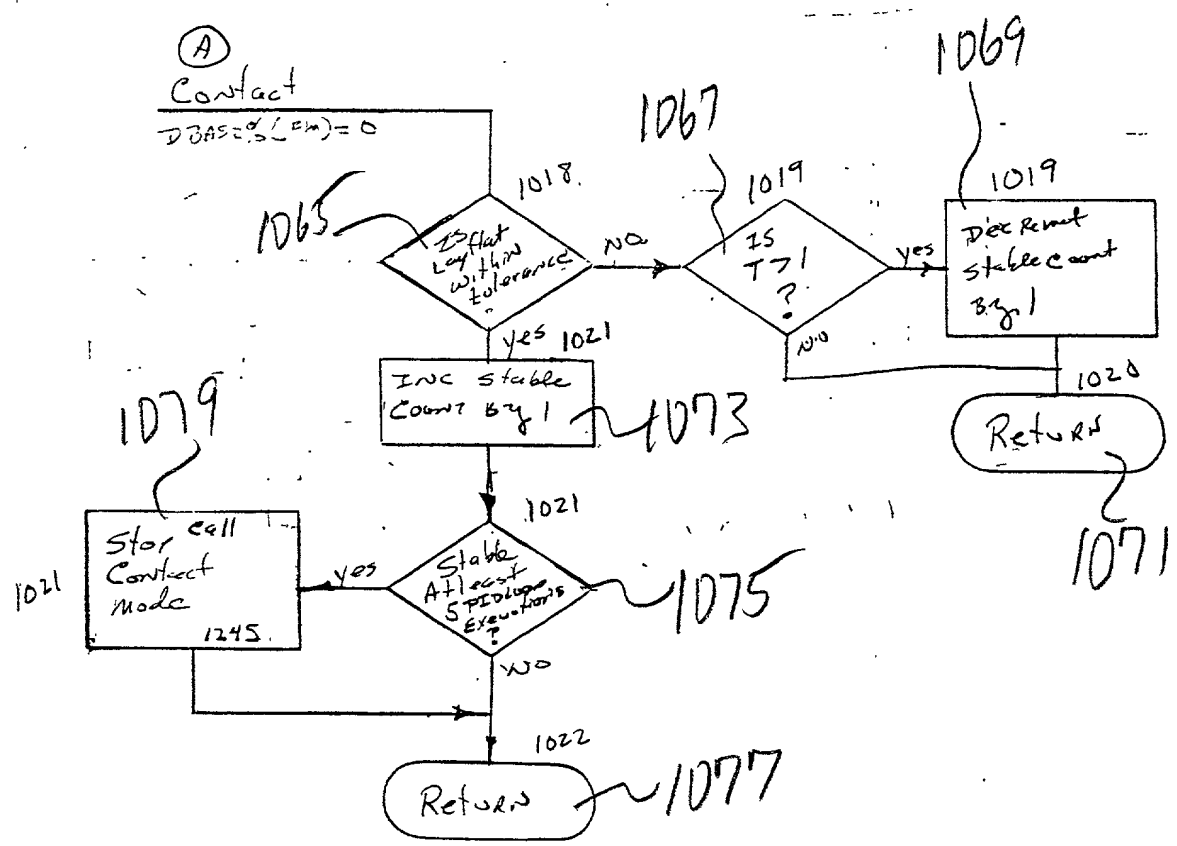
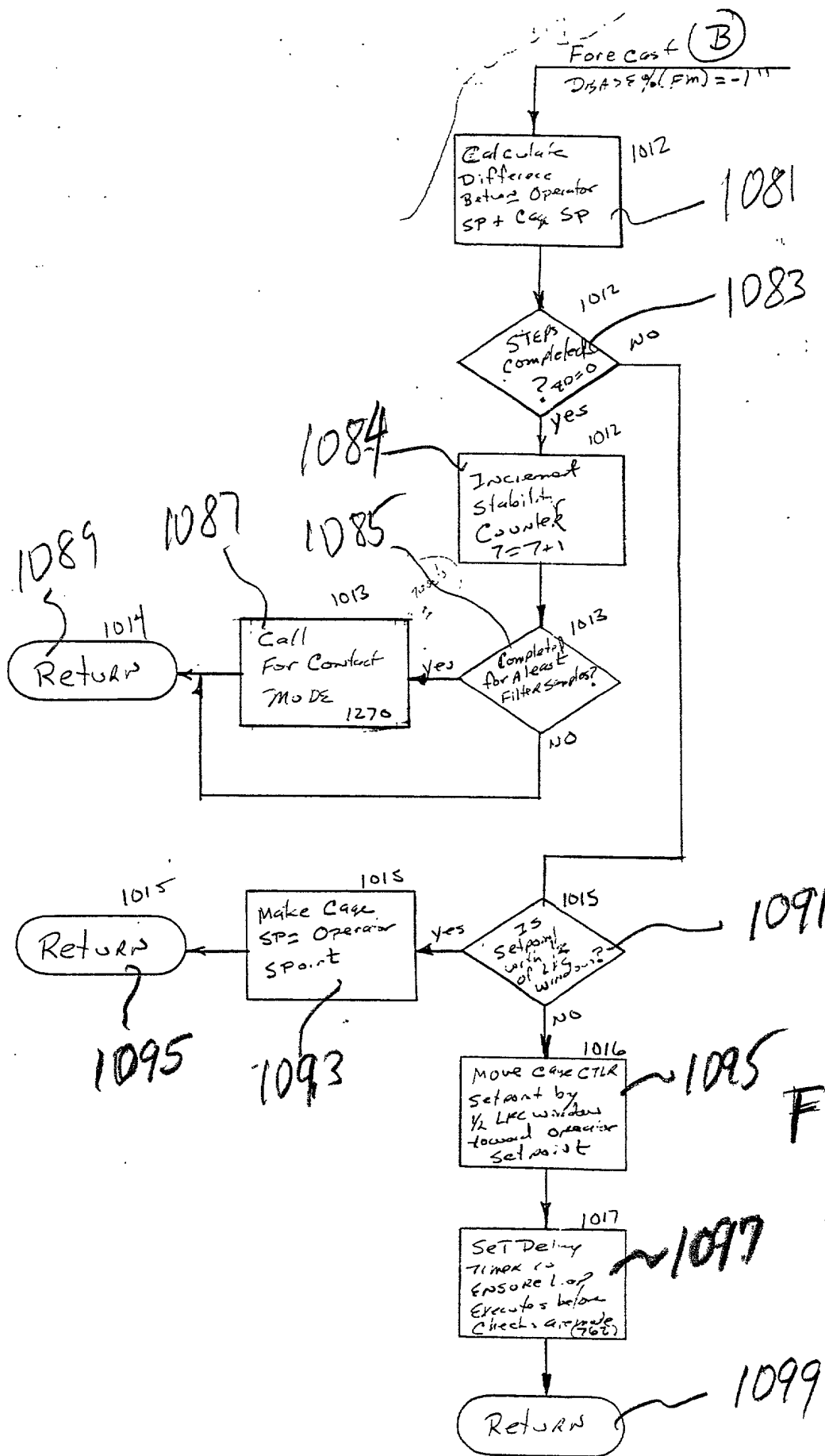


FIGURE 44 D
CONTACT MODE

FIGURE 44E



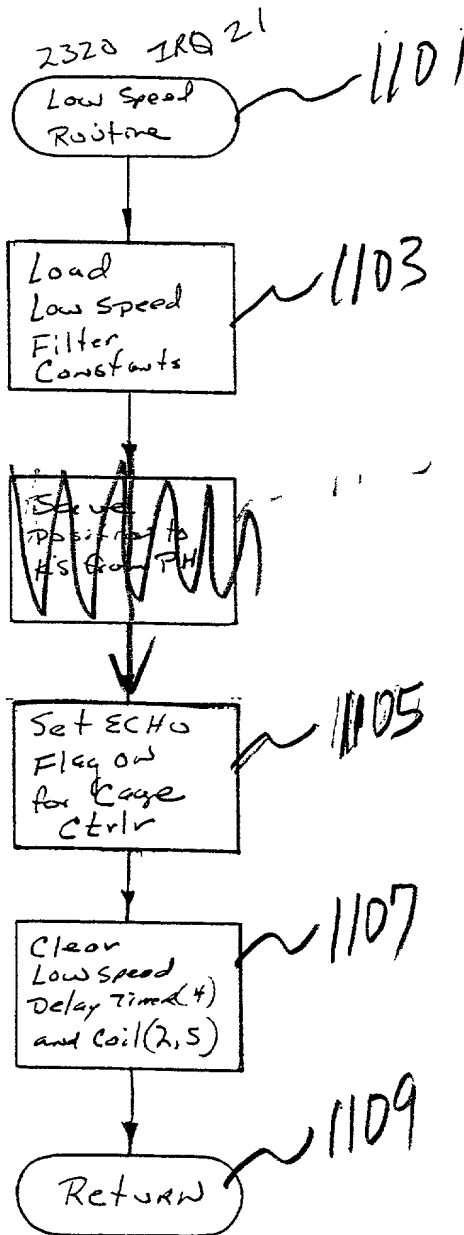


FIGURE 44 F

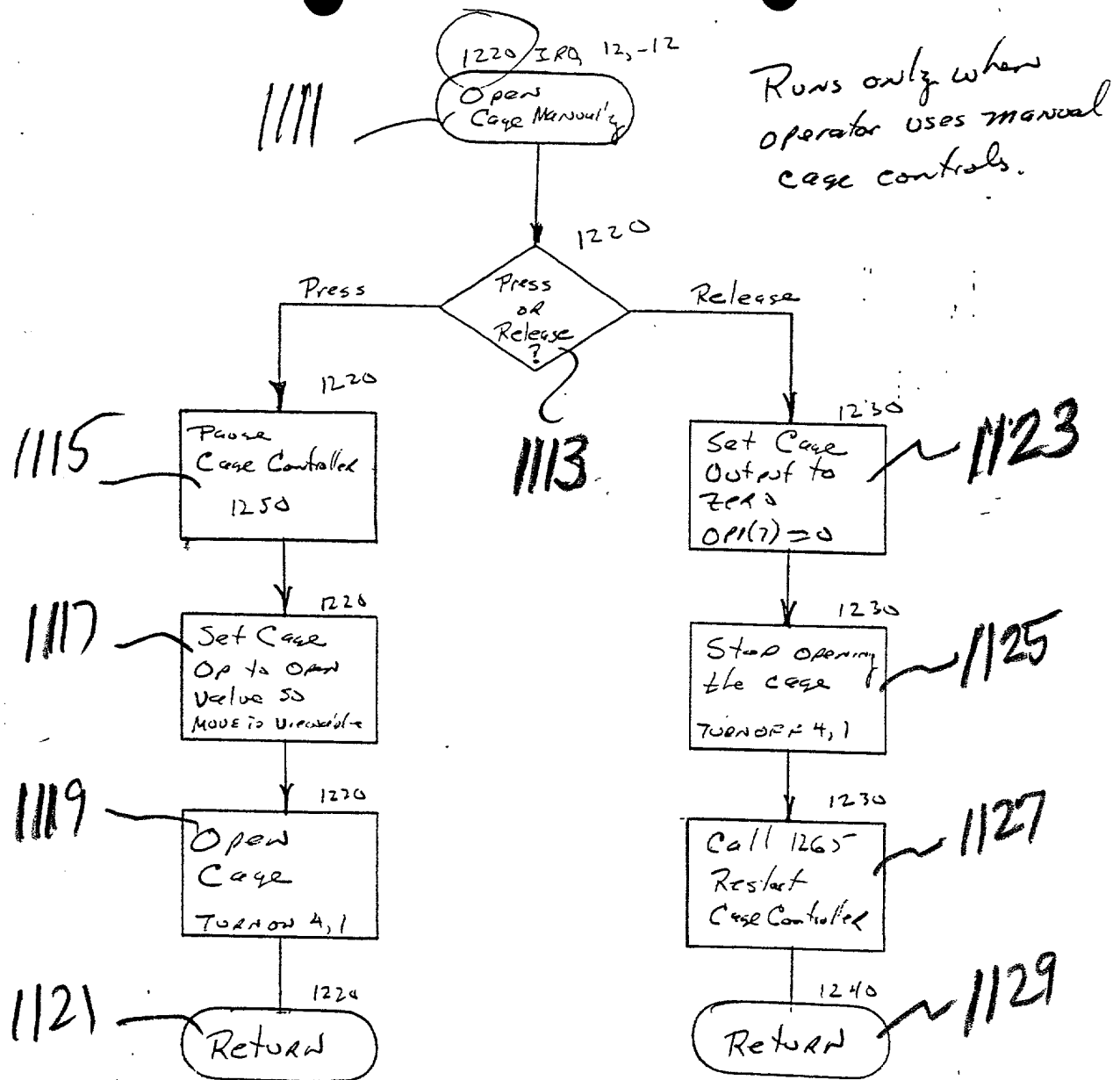
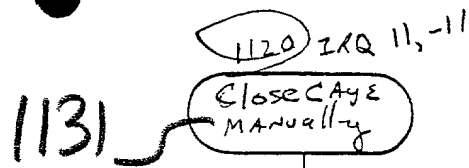


FIGURE 44G



Runs only when operator uses manual cage controls

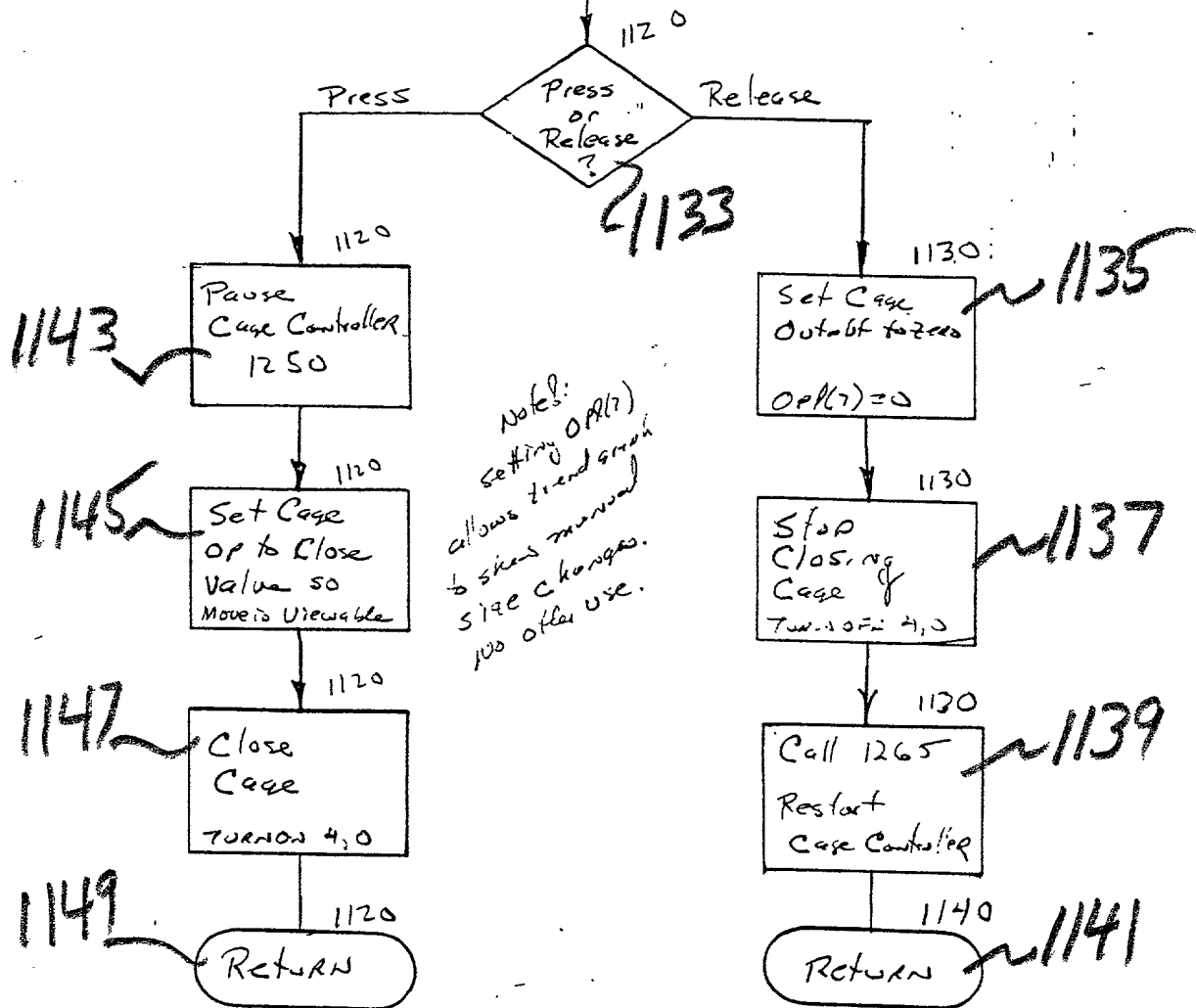


FIGURE 44 H

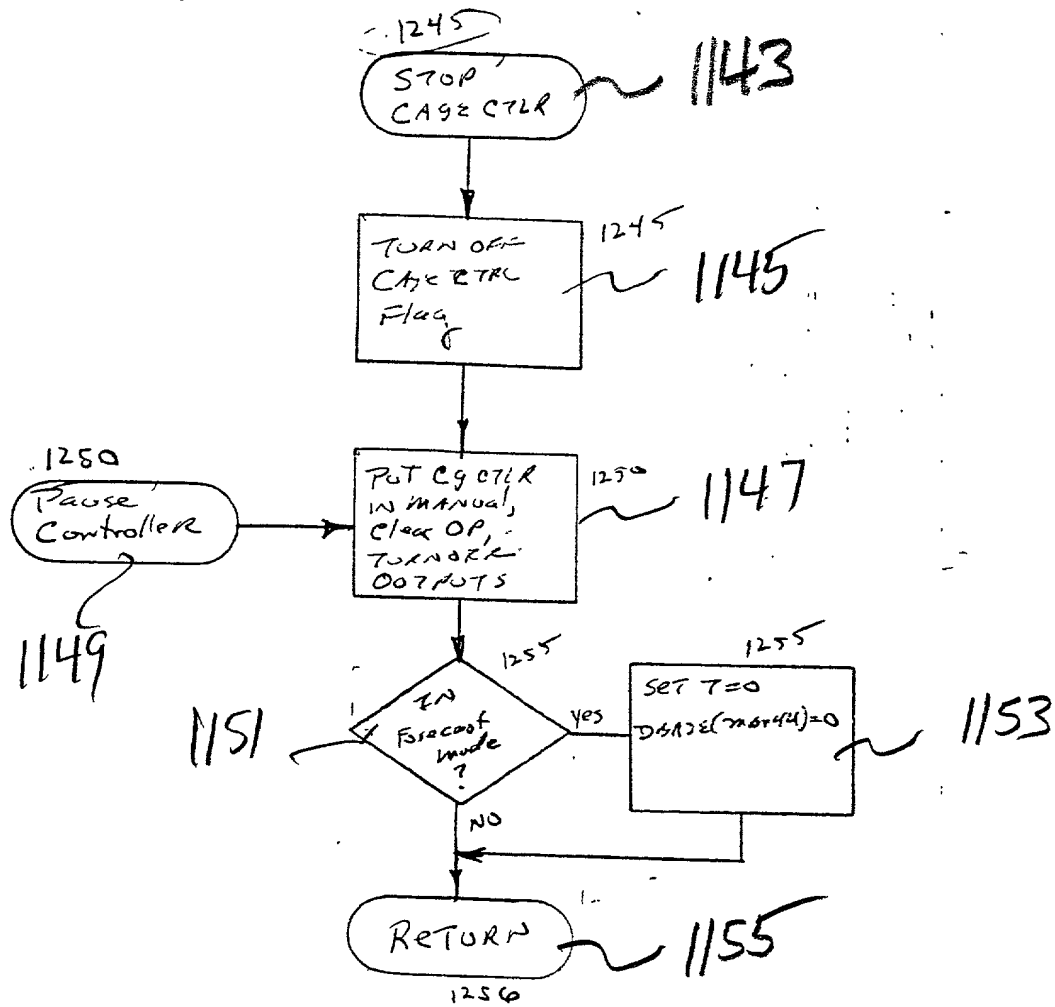


FIGURE 44 I

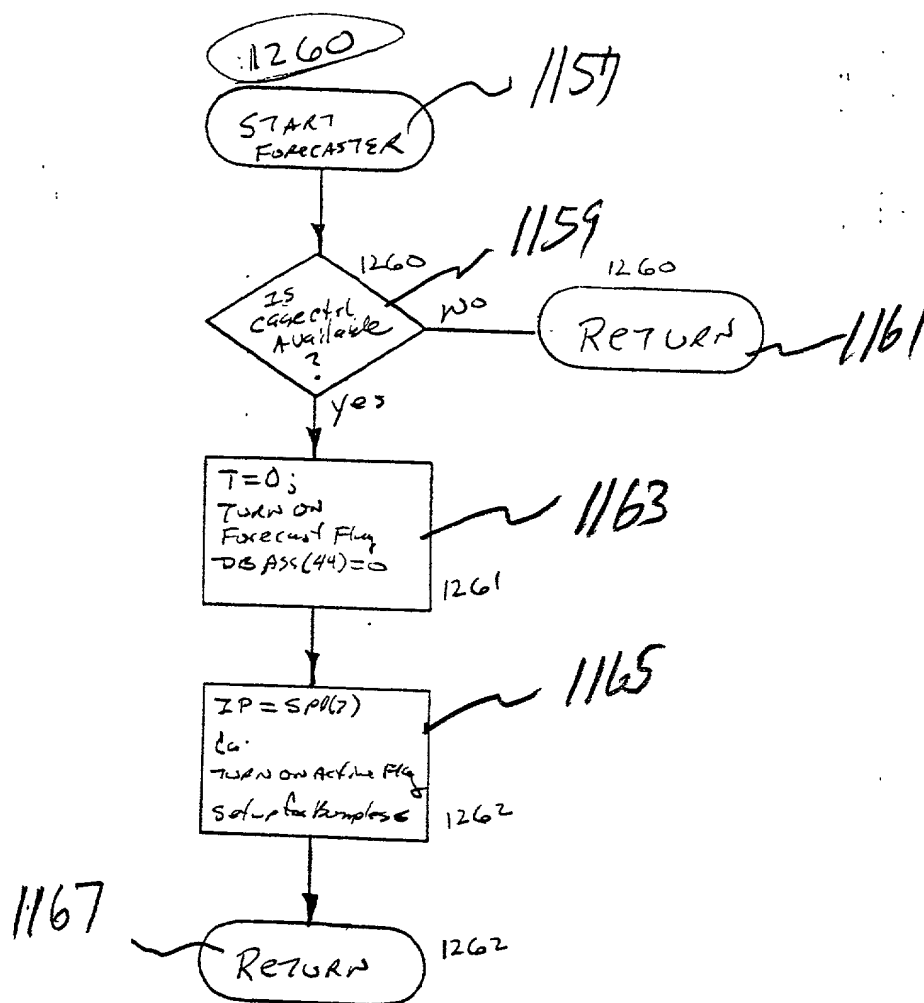


FIGURE 44J

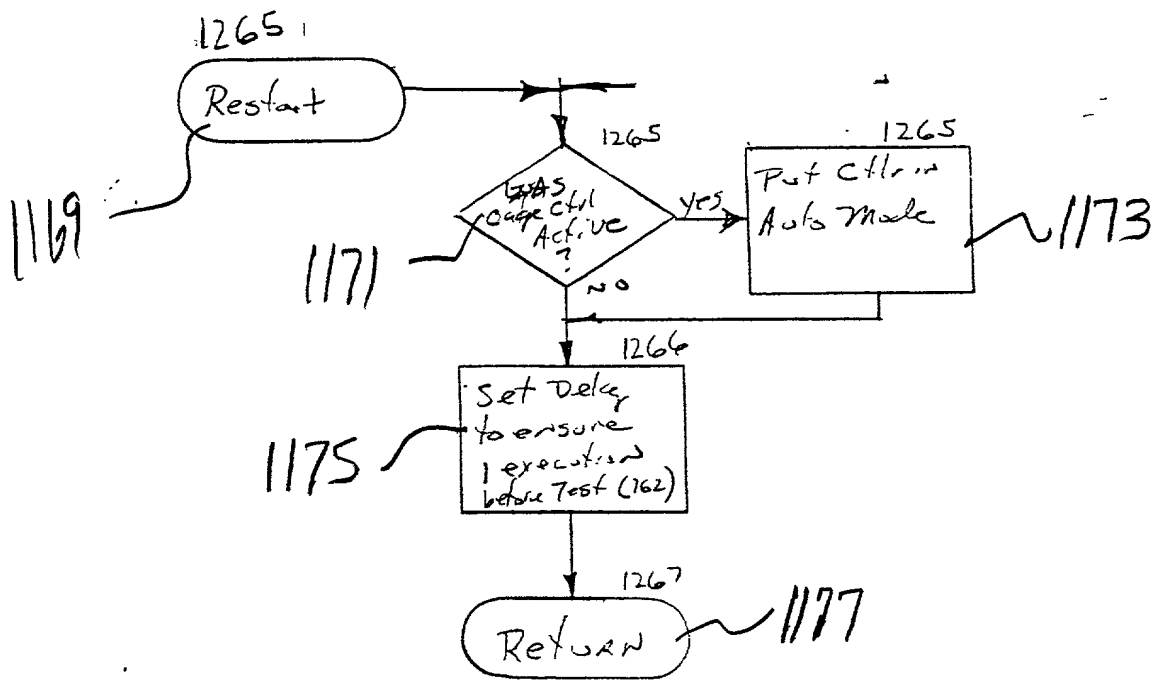


FIGURE 44K

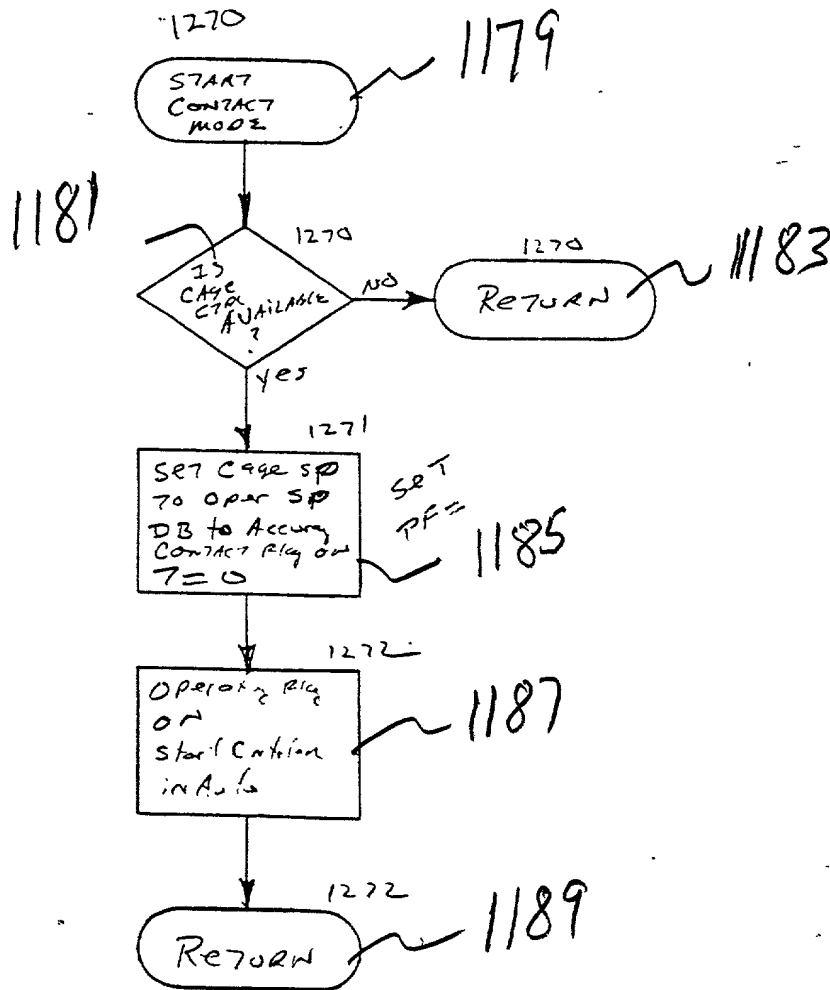


FIGURE 44L

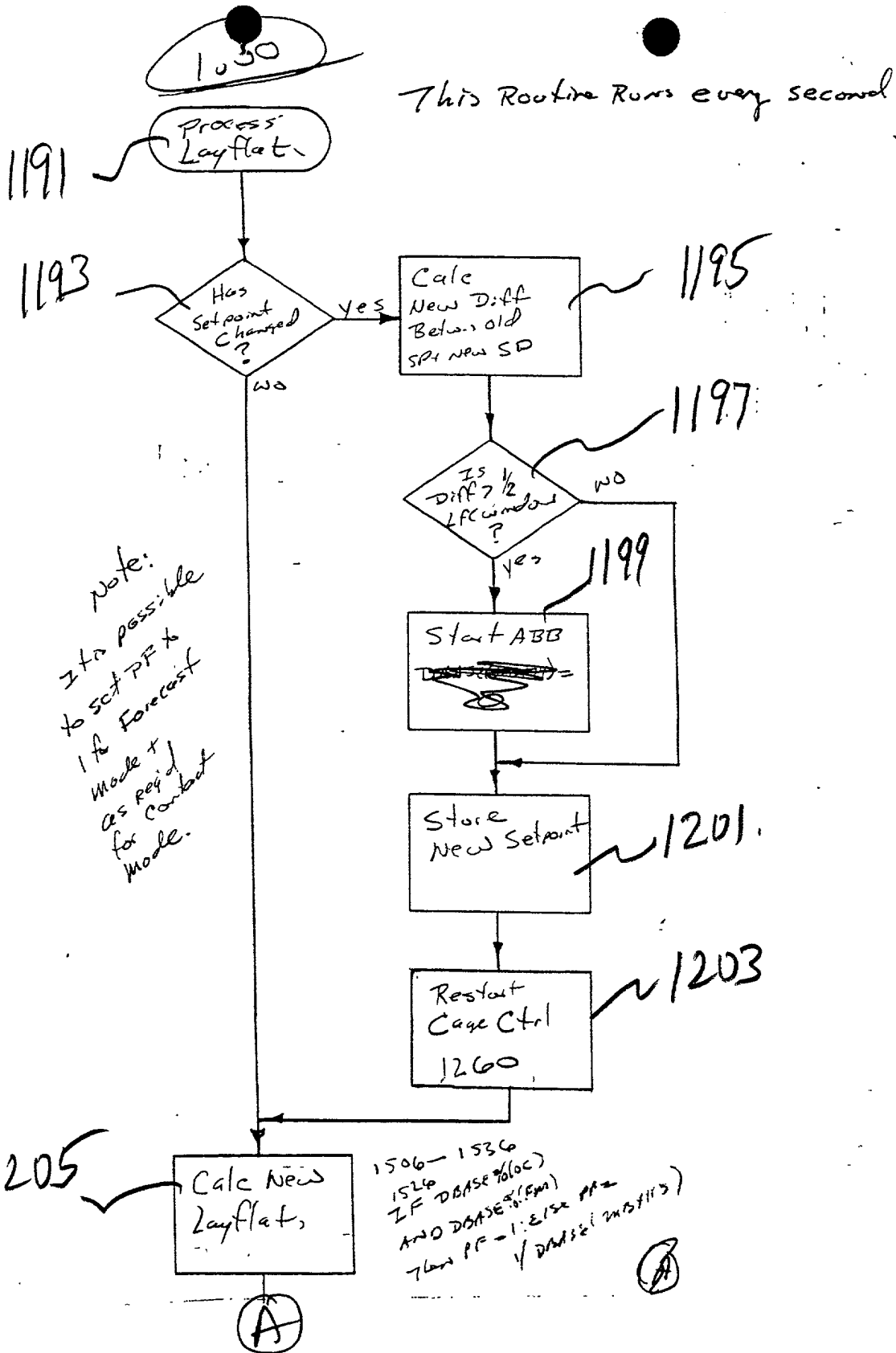


FIGURE 44 M

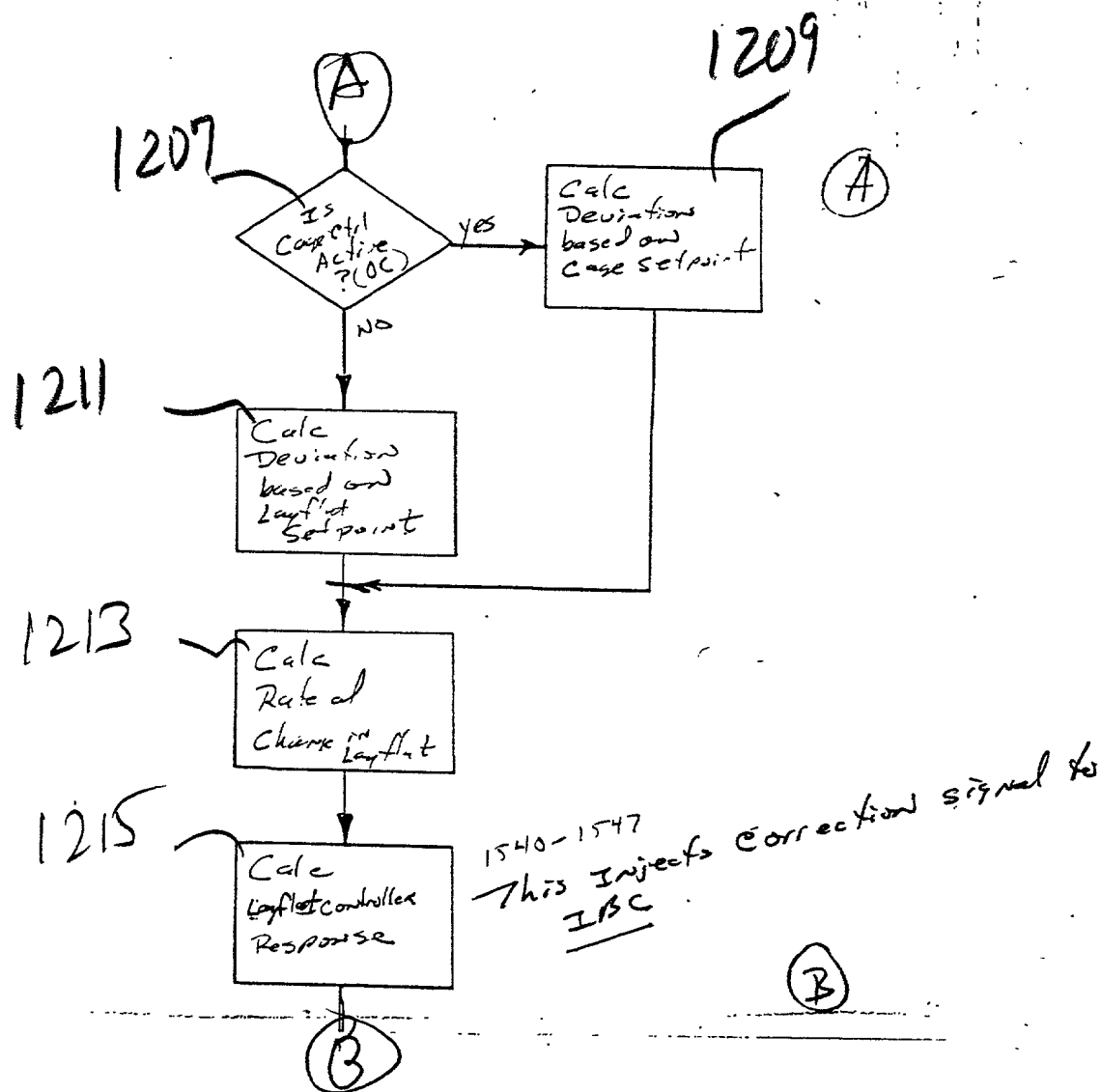
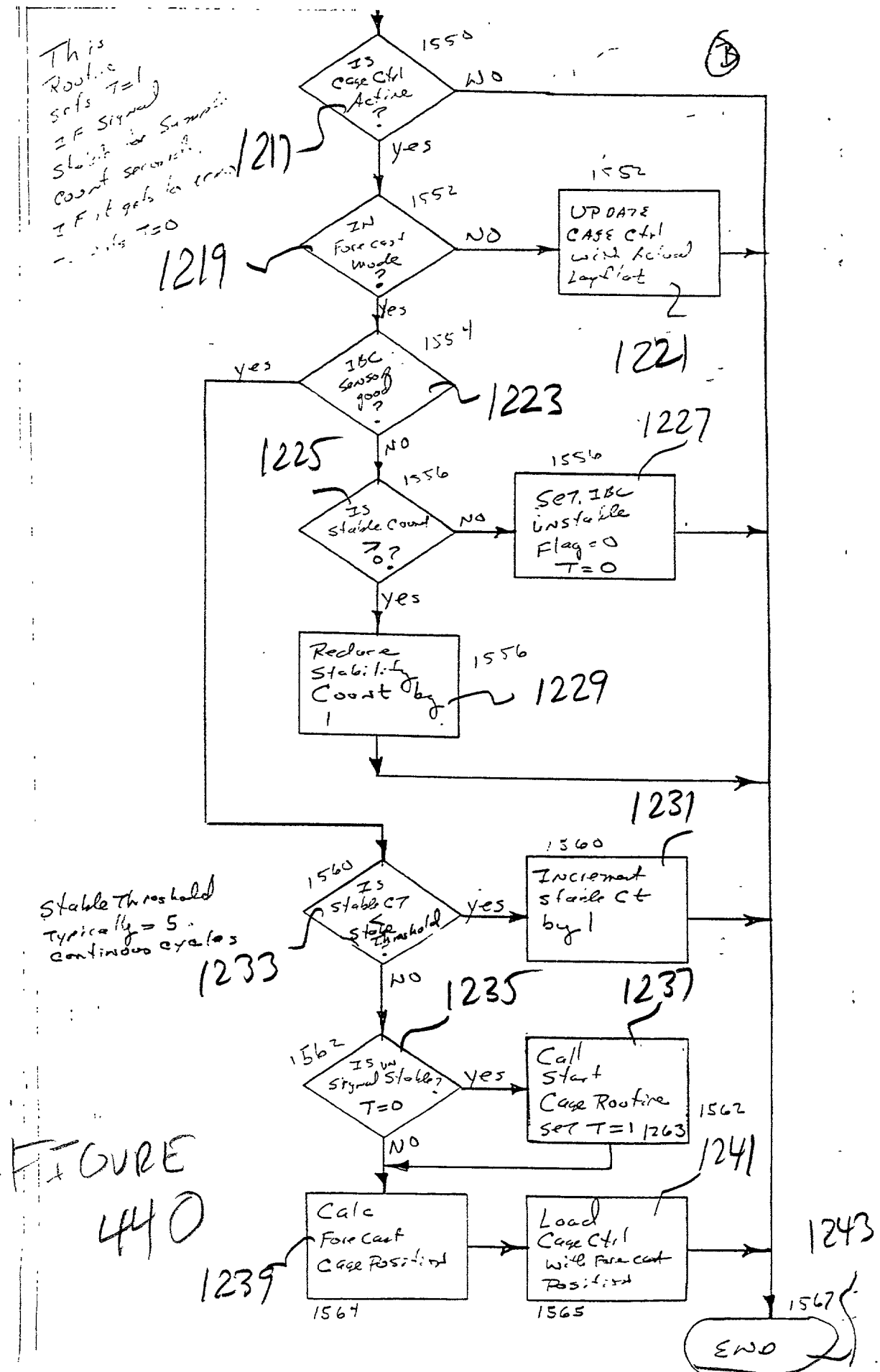


FIGURE 44N

FIGURE 440



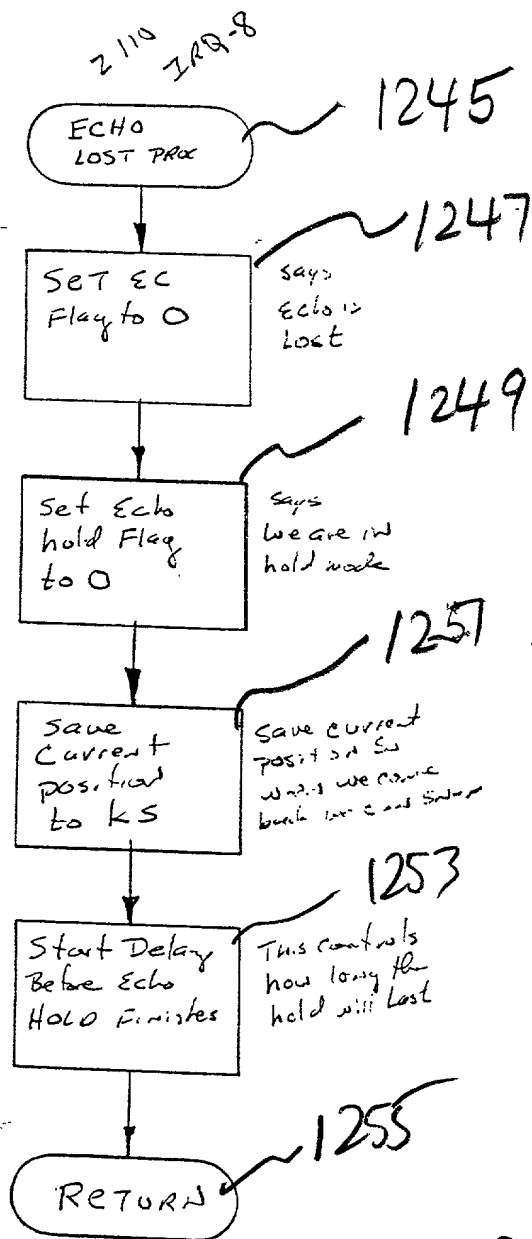


FIGURE 44 P

1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308</
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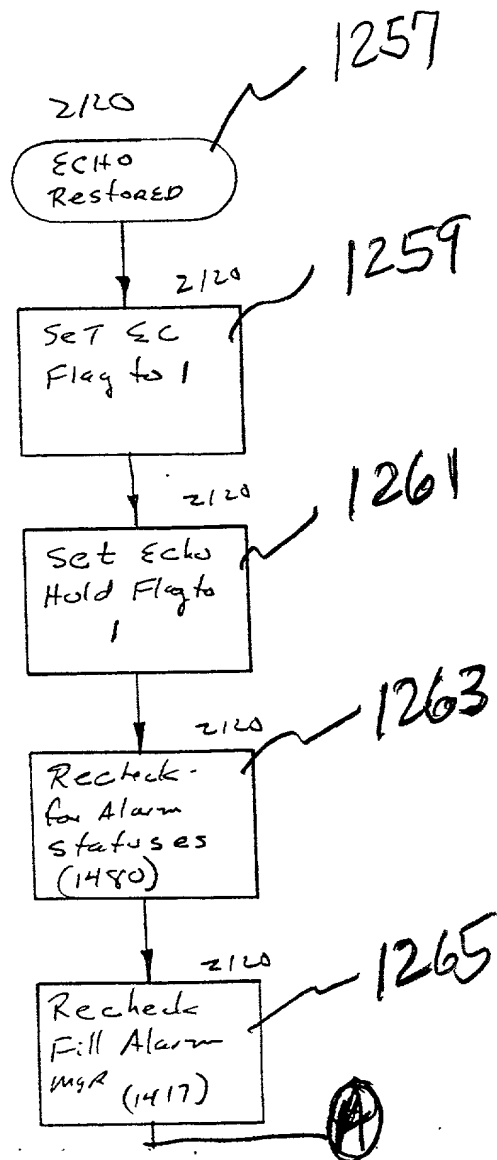


FIGURE 44Q

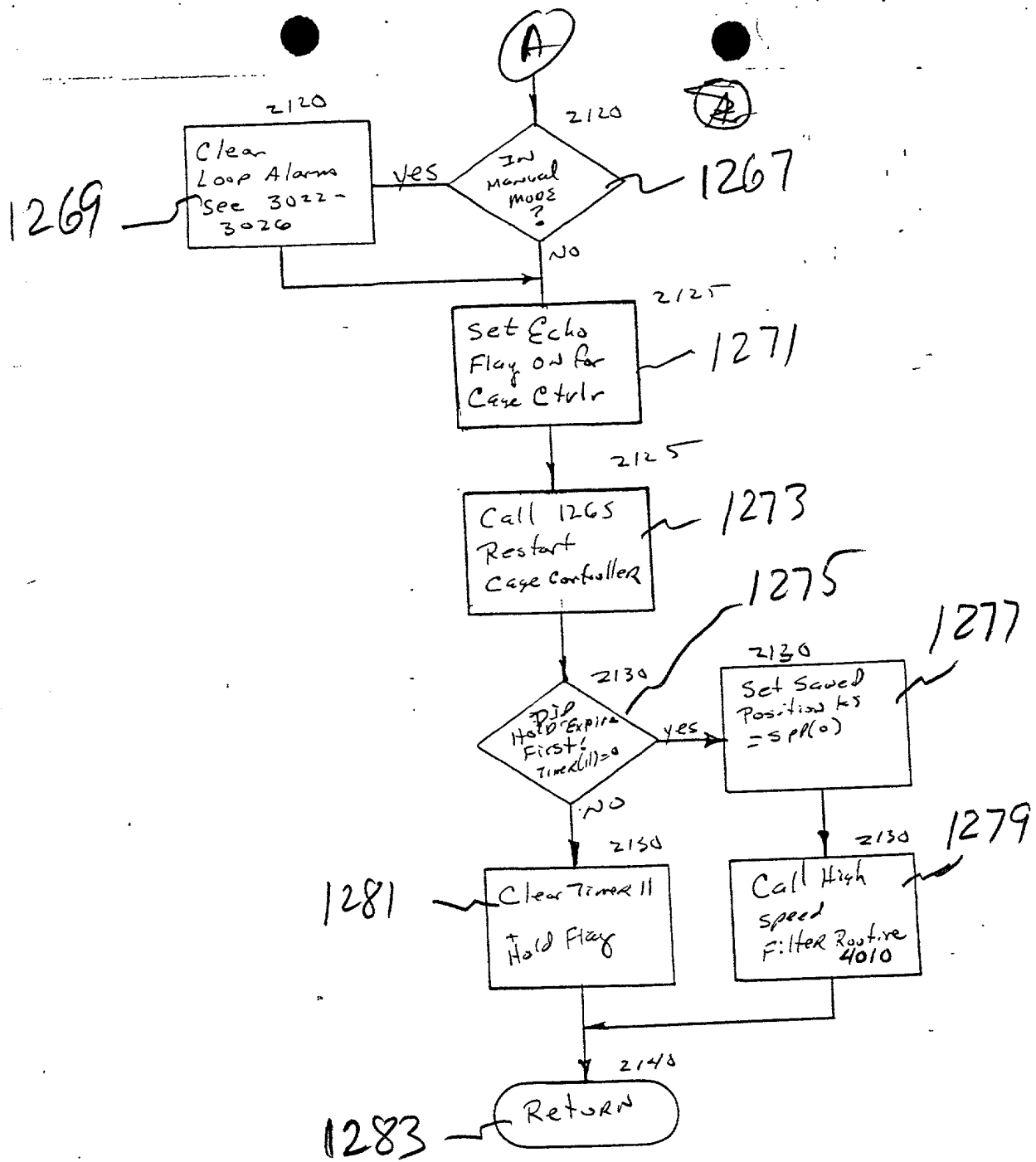


FIGURE 44R

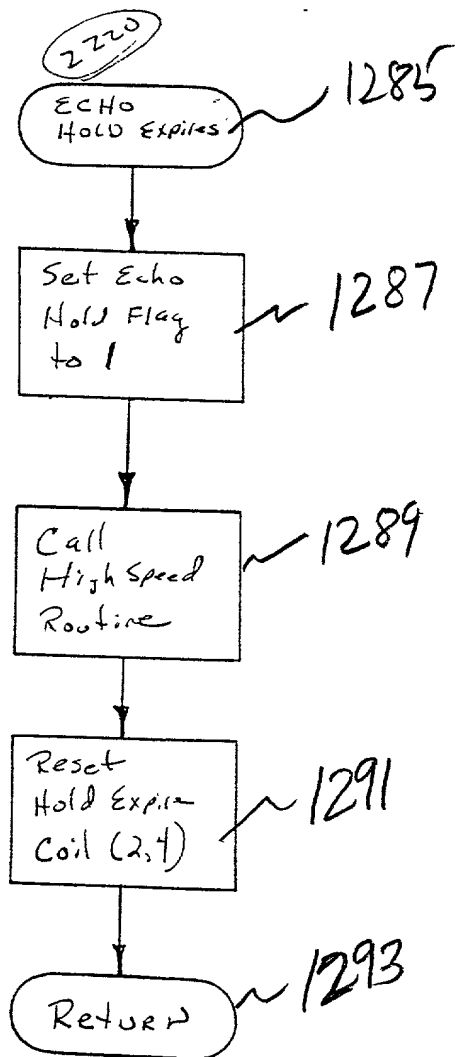


FIGURE 445

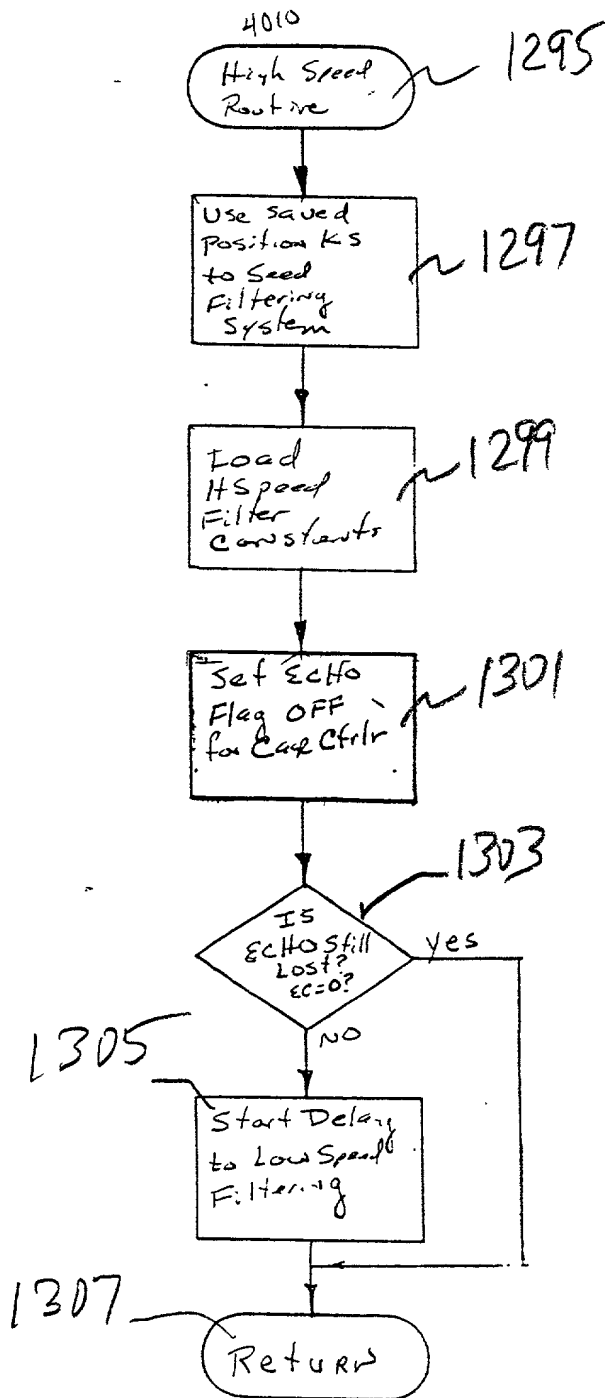


FIGURE 44 T

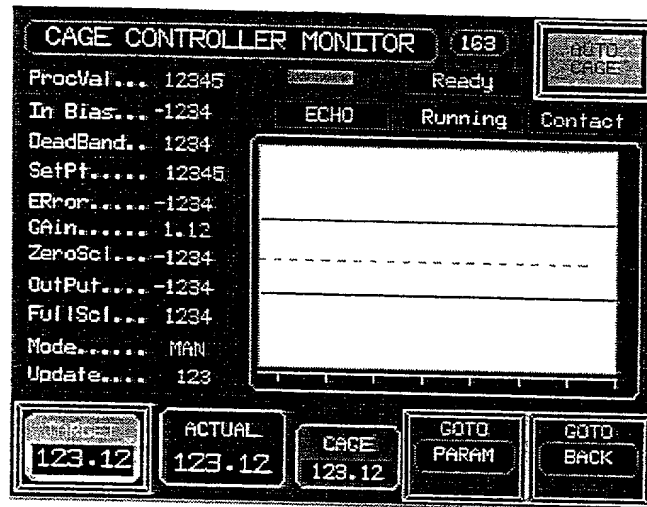


FIGURE 45

FIGURE 46

CAGE CONTROLLER
PARAMETERS

166

ACCEPT

40 MIN P
1.1

45 OVRLM
1.12

48 CGSIZE
123.12

41 UPDAT
12.1

46 CONCT
1.12

42 ERROR
1.12

47 MAX P
1.1

READY

CAGE CONTROLLER PARAMETERS: To
get help on a parameter, press
HELP and enter the number.
Press ACCEPT to load new
values.

HELP

GOTO
BACK

FIGURE 47

106010 106010 106010

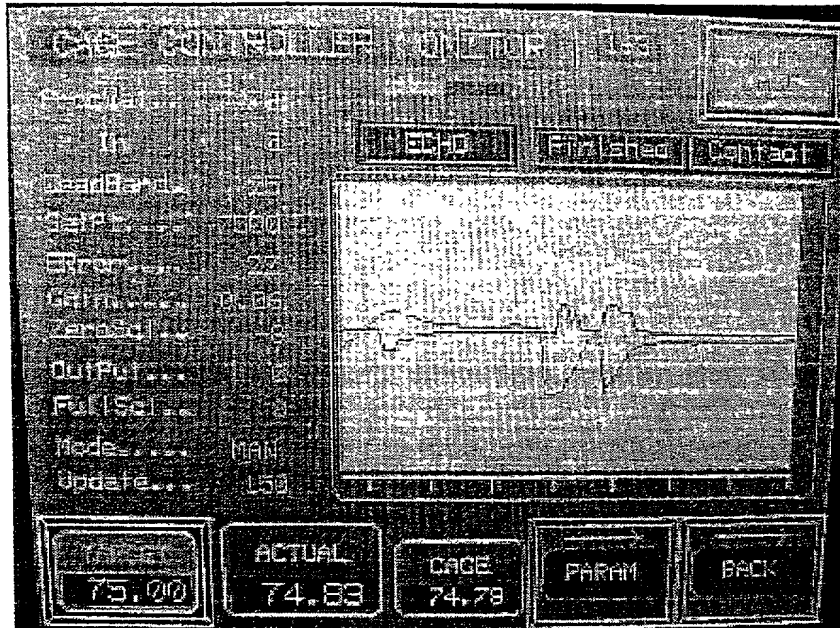


FIGURE 48

[illegible]

FIGURE 49

The screenshot shows the 'CAGE CONTROL UNIT' interface. On the left, a list of parameters is displayed with their current values:

- Program... 0000
- Unit... 00
- Transmit... 100
- Self... 0.000
- Error... 0.00
- Unit... 0.00
- ZeroGain... 0.0
- Output... 0.0
- FullScale... 0.0
- Mode... AUTO
- Update... 50

On the right, there is a graph area labeled 'EDHA' and 'CAGE CONTROL UNIT'. The graph shows a signal waveform. Below the graph, there are several buttons: 'PARAM', 'BACK', 'ACTUAL', 'CAGE', and '75.00'.

FIGURE 50

106010" 10062360

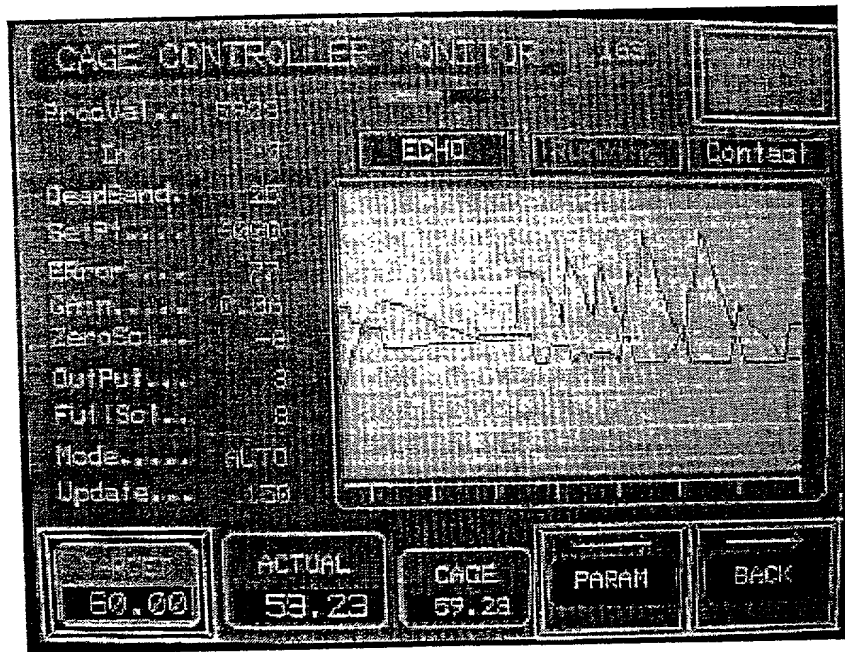


FIGURE 51

706010 1306306

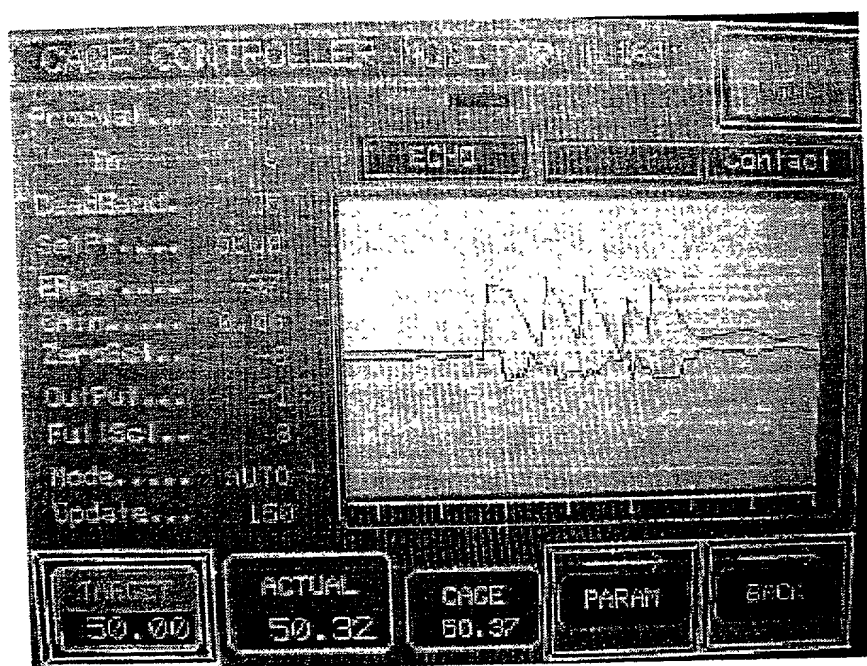


FIGURE 52

T06010 13352800

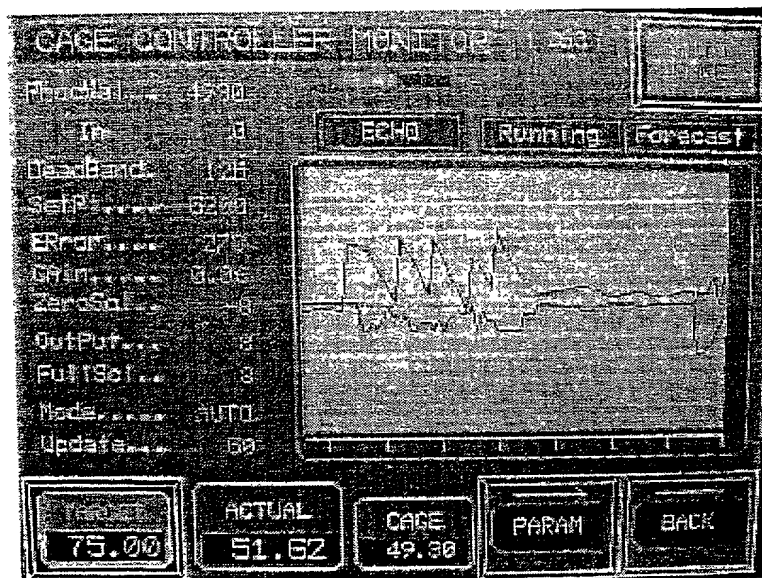


FIGURE 53